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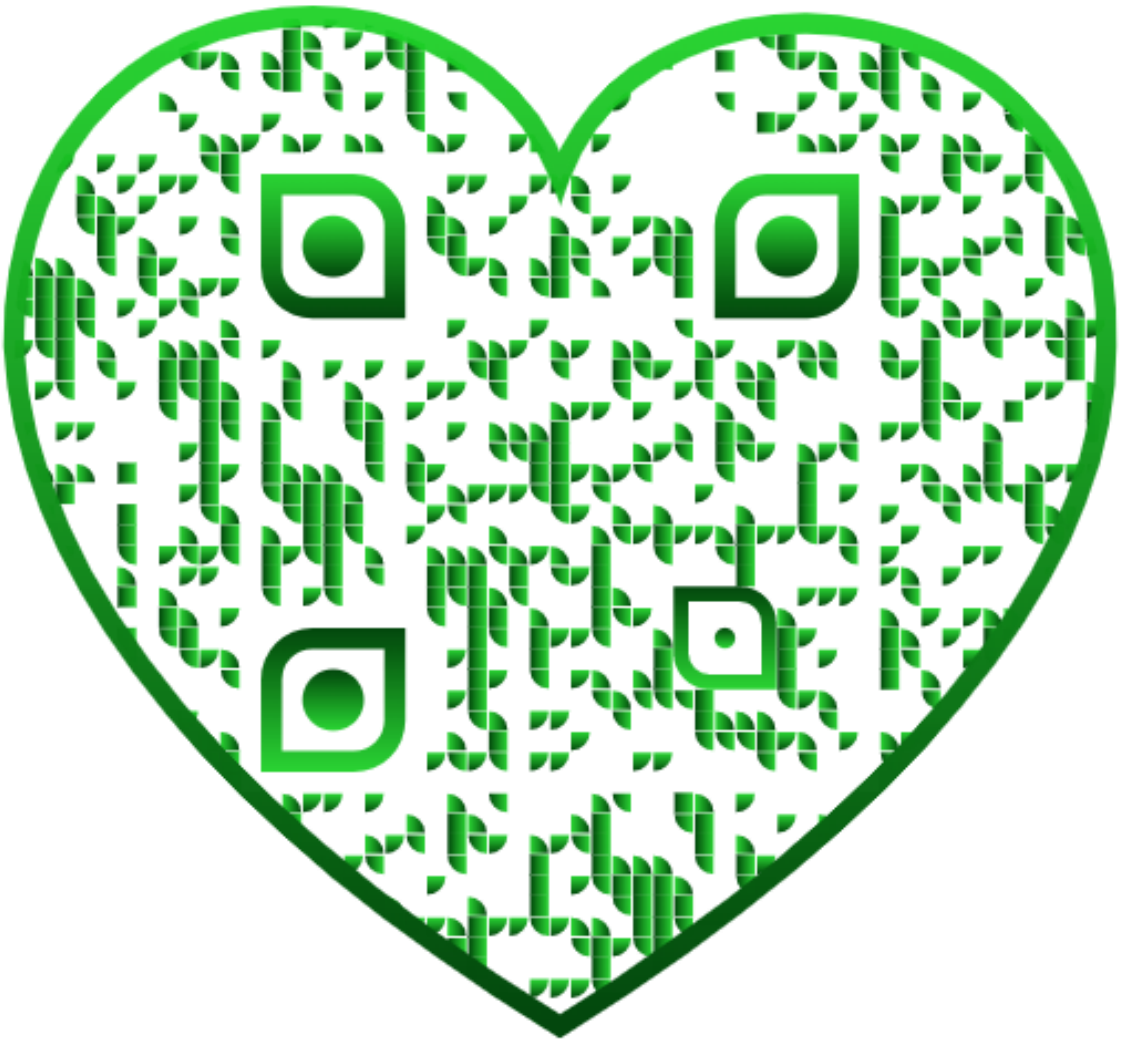
lp

ANALOG HIFI AND VINYL CULTURE



finite elemente

THE SCIENCE OF SOUND

MADE IN GERMANY

Pagode Signature MK II

THE ART OF ELEGANCE

www.finite-elemente.eu

LP International

This issue

As we inexorably approach the autumn of 2023, we would like to brighten up the shortening days with a new edition of our magazine „LP International“. A glance at the title of the new issue reveals that we have dealt with very special things this time. The rack from the German manufacturer Finite Elements is undoubtedly one of those special features, and we were very surprised at how great an impact such a measure can have on the sound of a hi-fi system. The same can be said for the mains filter solution from Audes from Estonia, which once again shows how important a clean mains supply is for the overall result in times of increasing pollution of the power grid. With the very universal „Profiler“ tonearm, Clearaudio delivers a nice statement for very successful engineering in the middle price segment. The arm is an excellent choice for operation with MM cartridges as well as for high-quality MCs. We will present one of these to you in this issue: the Skyanalog Reference is a top-class MC. It clearly shows that Chinese manufacturers have also gained a foothold in this product category and can build excellent products. Two tube amplifiers from Eastern Europe round off the picture: the Qualiton A75 comes from Hungary and also handles power-hungry loudspeakers with ease, while the Fezz Audio model from Poland belongs to the rather rare species of parallel single-ended devices and is used for converters with higher efficiency is suitable. Finally, with the Xavian loudspeaker from the Czech Republic, we round off the test field of this issue and are sure that we have found something interesting for you too.

Holger Barske, Editor in Chief

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New fully automatic turntable by Pro-Ject

With the A2 model, the Austrian manufacturer Pro-Ject is presenting its next fully automatic record player model, which will soon be available in stores at a price of 1200 euros. The designers have given a lot of thought to how to reconcile sound quality and functionality with the sub-chassis turner.

A new feature of the A2's automatic function is the option of selecting the appropriate starting point for 7" and 12" records. The engine control now also masters 78 rpm, so that you can dive back into old shellac collections. In typical Pro-Ject fashion, the engine is electronically controlled. Press start and the tonearm will automatically move into the lead-in groove of the record. During playback, the automatic is then completely decoupled. And since the automatic works completely mechanically - no additional electronics are required - the playback process remains completely unaffected.

Contact: Audio Tuning Vertriebs GmbH, Mistelbach, Austria
Internet: project-audio.com

- Eightfold hand-painted MDF main chassis
- Die-cast aluminum automatic mechanism
- Black 8.3" ultra light aluminum tonearm
- Electronic speed changeover 33/45/78 rpm
- Tracking force adjustment by spring force
- Gimbal 4-point aluminum tonearm bearing with extremely low friction
- Damped counterweight
- Preset Ortofon 2M Red pickup
- New aluminum feet with silicone cushioning
- Precise mechanics with automatic start/stop function
- Damped aluminum platter
- Carbon fiber reinforced antimagnetic headshell
- Premium semi-balanced connection cable
- Cover hood included
- Handmade in Germany

Magnat MTT 990 50th Anniversary Edition

Crazy times out there: Artificial intelligence creates content such as text, images and even music. But we know that real music comes from real artists and one of the most beautiful media for it is still the LP. That's why now is exactly the right time to equip yourself with the perfect turntable to be able to play the analog treasures on vinyl under the best conditions. That's why Magnat has carefully revised the MTT 990 turntable in time for its 50th birthday and proudly presents the „Anniversary Edition".

Magnat is celebrating its 50th birthday next year and on this occasion they are giving you a special edition of the MTT 990 record player. And it differs from the „normal" MTT 990 not only in terms of its appearance with its elegant, gray high-gloss finish, but also with a few technical details.

The full-size platter is made of a high-density polymer and is therefore completely resonance-free. The physical properties of the POM material used are similar to vinyl and are thus in perfect harmony with the record. The supplied felt mat can therefore be used as an option. This sits on the proven direct drive motor with its flawless synchronization and high torque. In addition to speeds of 33 and 45 rpm, the drive also masters 78 revs for the rare shellac records. As usual, the housing consists of high-density MDF and can be perfectly adjusted with its height-adjustable feet. With a weight of 11 kilos, the MTT 990 also demonstrates its excellent workmanship in the special edition. The acrylic dust cover can be fitted as an option – according to the taste of the user. Tonearm and system with high-end quality The tonearm of the special edition is the proven, 10 inch long J-shaped arm made of special aluminum alloy. The shape offers the optimal angle for the lowest distortion and the gimbal stainless steel bearings ensure optimal working conditions for the elliptical pickup. This comes from Audio Technica and is a VM520EB, which, as a dual moving magnet system, also makes absolute subtleties audible. In order to visually manifest all these tonal details and of course to celebrate our birthday properly, we have given the MTT 990 a high-gloss finish in „Anniversary Gray". In addition, the Limited Edition gets a „50 Years" logo.

Contact: Premium Audio Company Germany GmbH, Pulheim
Phone: 0049 22348070 · Internet: magnat.de

Wilson Audio Sasha V

With the "V" generation, US manufacturer Wilson Audio has presented the latest version of what is probably its most important floorstanding loudspeaker model. It can be described as the legitimate successor to the legendary "Watt/Puppy" models that caused the manufacturer's worldwide rise.
The number of improvements compared to the predecessor "Sasha DAW" are numerous. For the first time, a material called "S-Material" is used for the baffle of the mid-high module, just one of three composites Wilson uses to create its unique cabinets. The driver assembly remained partly unchanged compared to the predecessor, only the 7" bass-midrange driver and the tweeter were taken over from the larger models. Complete treatises could be written about the changes alone, but we'll wait a bit: later in the year an intensive review of the Sasha V in the LP magazine is planned. Just this much at this point: the mid-woofer now actually has an AlNiCo magnet system: Sometimes the good things from the past just come back. As always with Wilson Audio, the number of bolts one can turn to tune the system is vast. There's even a built-in bubble level that allows you to keep the system perfectly level. As usual, there is not a single detail on this speaker, no matter how tiny, that was left to chance and the number of modifications is very surprising in view of the degree of perfection already achieved. It is not surprising that the pleasure is not cheap: The Sascha V, which is available in a large number of surface variants, changes hands for 59,000 euros per pair (in Germany, YMMV).

Contact: Wilson Audio, Provo, Utah, USA
Phone: 001-801-3772233
Internet: wilsonaudio.com

Musik hören
ist einfach

Musik fühlen
ist einfach analog

Tauchen Sie ein in die ergreifende Welt der analogen Musikwiedergabe.

Jetzt im guten Zeitschriftenhandel

With Gentle Force

Clearaudio is slowly renovating its tonearm range. The latest addition from Erlangen in central Franconia goes by the name of Profiler and is a very accomplished supplement to the portfolio.

A special visual characteristic of the Profiler is the rounded „bell“ above the vertical bearing

The counterweight design is rather simple but works without fuss

And once again, I wonder where the time has gone: Clerarudio's „Tracer," which I just considered to be Clearaudio's freshly released rotary tonearm offering, was a guest with us five years ago and has led a rather inconspicuous life in the comparison gear pool ever since. This is by no means a negative thing, quite the opposite: The Tracer, which now costs EUR 2,500, has repeatedly proven to be a sound-wise neutral and completely trouble-free arm for a wide range of cartridges.

Clearaudio has positioned the brand new „Profiler" directly below the Tracer, and the manufacturer calls it a „link to the completeness of the portfolio" on its website. Which, to be honest, I find a bit lacking in love - and you can believe me that there are a few much better reasons to take a closer look at the new one.

At EUR 1,900, it falls within an attractively priced region - after all, we live in times when you have to shell out over EUR 3,000 for the smallest reed tonearm, and an SME also costs from (just under) EUR 3,000. Only Regas and Pro-Jects are available for noticeably less money. The list does not claim completeness – I just wanted to stay with the better-known manufacturers.

Although experience has shown that Clearaudio arms are primarily used in the manufacturer's ecosystem, there is no reason why these finely crafted gems should not be used on entirely different turntables. Clearaudio makes it particularly easy for us: The nine-inchers – including the Profiler – require a standard installation distance of 222 millimeters and are equipped with a Rega-compatible shaft, i.e., a through-hole of about 25 millimeters in diameter is required for mounting, and a few millimeters more when using the supplied flange, which is also fastened with three screws. This is a widely used standard dimension and can be realized afterward in case of doubt with many turntables.

It makes sense to compare the Profiler with its big brother, Tracer. Here, you can see exactly where the manufacturer has saved a little and where he has not compromised.

The arm is, of course, height-adjustable and is locked in the flange with two grub screws

Let‘s start with the bearing design, which is identical in both cases. Tracer and Profiler are guided horizontally (i.e., when rotating over the plate) by two extremely smooth-running roller bearings in the arm shaft, while a tip bearing with sapphires is used for up and down. Both approaches have been tried and tested for many decades and have undoubtedly been implemented here in a very high-quality manner (aka backlash-free and smooth-running).

In both cases, the vertical bearing sits under a protective aluminum bell, the differences between which should only be optical. While the Tracer‘s bearing carries a tonearm tube made of carbon fiber, the Profiler uses one made of aluminum. The weight differences between the two should be slight; unfortunately, Clearaudio always shies away from specifying an effective mass. However, it should undoubtedly be in the medium-weight range in both cases, which should harmonize with most cartridges. Both tubes are cylindrical, and the Profiler‘s tube has been equipped with unspecified damping measures. Metal and carbon versions sound different, but I would not venture a qualitative weighting between the two approaches.

There are also differences at both ends of the respective tube. The Tracer uses a classic cranked headshell milled from aluminum, and the Profiler uses a very flexible variant in the „Schröder style.“ Here, both offset and overhang are variable, but they need a little more sensitivity in the adjustment.

At the opposite end of the Profiler is a simple threaded pin onto which the cylindrical chrome-plated brass counterweight is screwed. That is difficult to set in place but, therefore, stays in place safely. The connection is vibration-damped. With the Tracer, the whole thing is convenient; here, the weight can be finely adjusted via a knob mounted on the back of the arm tube. In addition, an additional mass can be screwed onto the counterweight if a particularly heavy cartridge needs to be balanced. Anti-skating? Yes, of course. Adjustable via a knob on the base of the arm, just like on the Tracer. The headshell can be rotated in both cases, so azimuth adjustment is possible.

Teammates

Turntables:
· Clearaudio Ovation
· Clearaudio Master Innovation

Pickup Cartridges:
· Hana Umami Red
· Mustang MM
· DS Audio DS-003

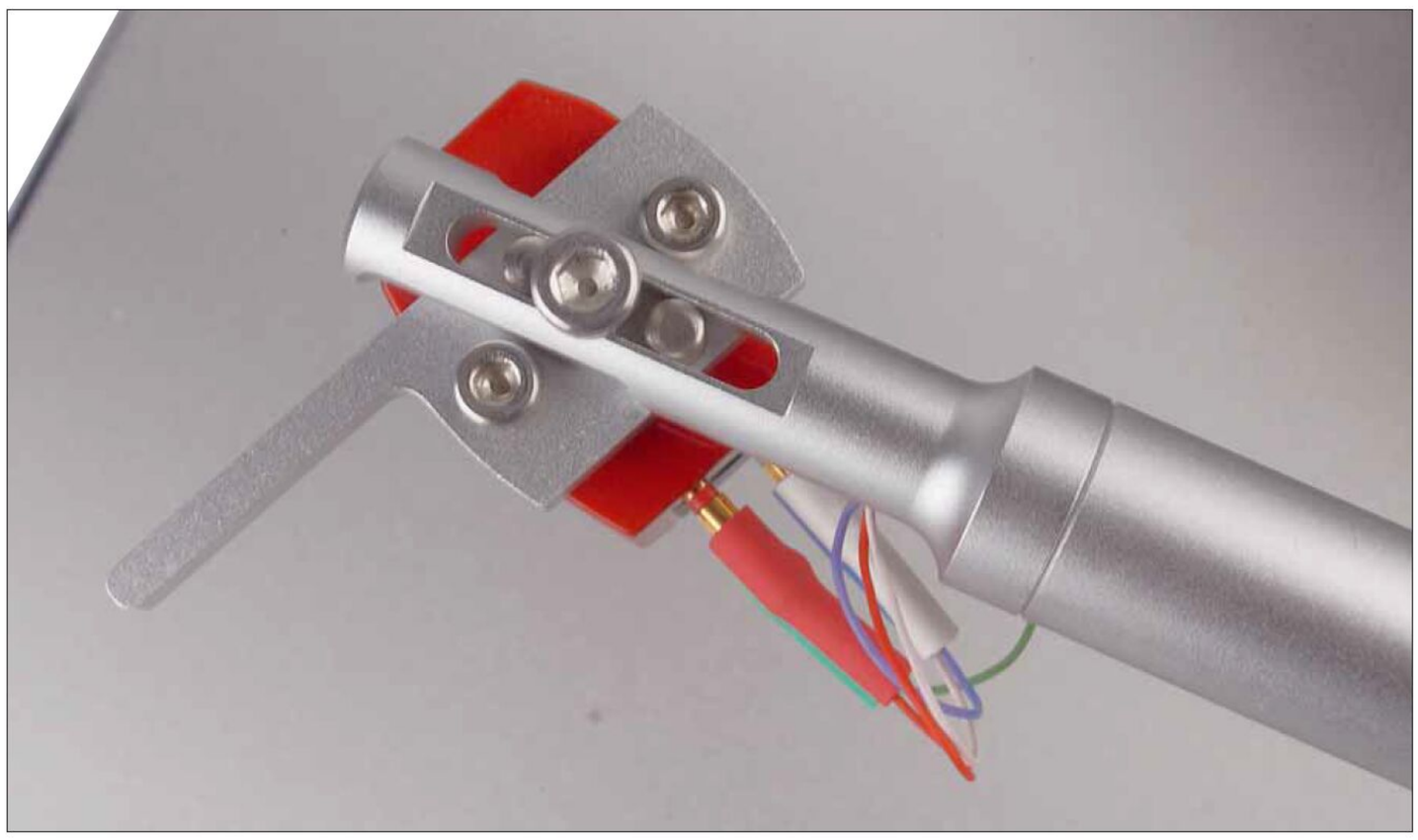
Phono preamplifiers:
· B.M.C. MCCI Signature ULN
· DIY mit Röhren

Preamplifier:
· NEM PRA-5

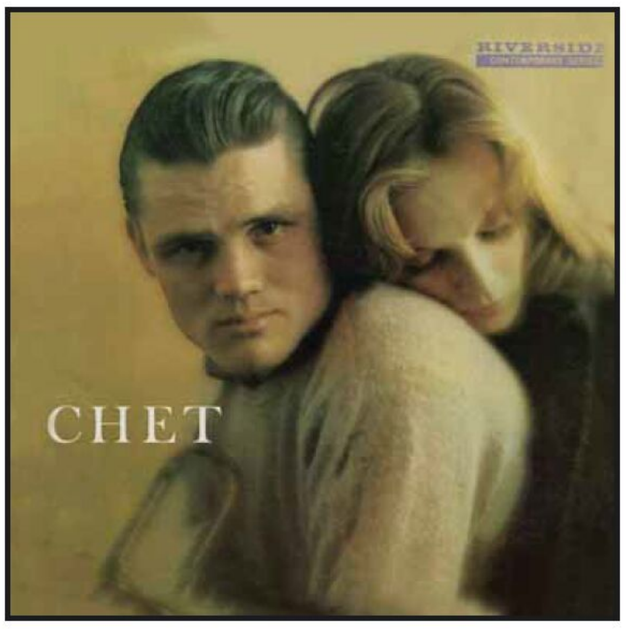
Power amplifier:
· Manley Mahi

Competitors

Tonearms:
· Clearaudio Tracer
· Clearaudio Universal



The headshell allows adjustment of both the offset and the overhang



Chet Baker – Chet

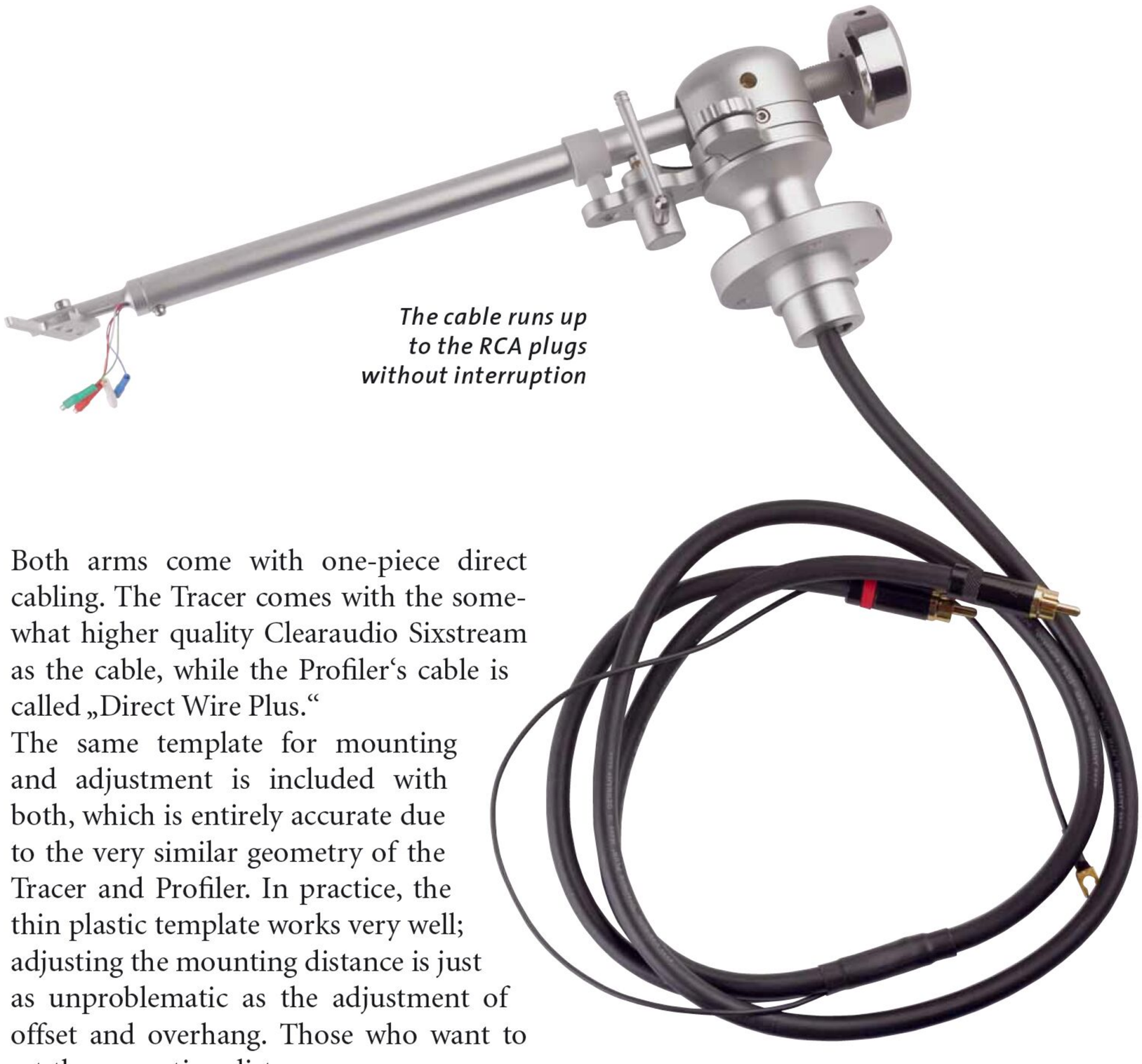
What we played

Chet Baker
Chet

The Spacelords
On Stage

John Coltrane
A Love Supreme

London Grammar
Californian Soil



The cable runs up to the RCA plugs without interruption

Both arms come with one-piece direct cabling. The Tracer comes with the somewhat higher quality Clearaudio Sixstream as the cable, while the Profiler's cable is called „Direct Wire Plus."

The same template for mounting and adjustment is included with both, which is entirely accurate due to the very similar geometry of the Tracer and Profiler. In practice, the thin plastic template works very well; adjusting the mounting distance is just as unproblematic as the adjustment of offset and overhang. Those who want to set the mounting distance even more conveniently with an external measuring tool will be pleased with the small center mark on top of the bearing cover.

Profiler and Tracer were allowed to prove their skills alternately on a Clearaudio Ovation, which they did very convincingly. And since we are dealing with potent, high-priced combinations, the cartridge should also be of corresponding quality: The Hana Umami Red proved to be a bull's eye on both arms. In both cases, the reproduction impressed with its very colorful and lively gait. Dynamically, I would grant the Tracer minimally better marks than the Profiler, which was pleasing with its sonorous and relaxed pace. With Chet Baker's quiet, melancholic masterpiece „Chet," I would even give the Profiler the preference; it seems more coherent and atmospherically denser here. Both Clearaudios are very deep and finely staggered; even much more expensive arms can't do that noticeably better.

When vocal skills are required (as with Hannah Reid, London Grammar), the lively Tracer scores points, especially at the upper end of the spectrum with fine resolution.

And if you want pure rock'n'roll, you can choose the Profiler, screw the incomparable Mustang MM underneath, and fly away with the Spacelords. It is an excellent combination – there is hardly anything better at this price for listening to music with the gut.

Holger Barske

Helpful: The height scale on the tonearm shaft

Clearaudio Profiler

· Price	1,900 Euro
· Distribution	Clearaudio, Erlangen
· Phone	+49 9131 40300100
· Internet	clearaudio.de
· Warranty	2 years
· Effective length	239,58 mm
· Weight	510 g

lp

Clearaudio Profiler

International 3/23

»Clearaudio's Profiler is a universal arm with a punchy, sonorous gait, excellent handling, and perfect build quality. Combined appropriately, it is an optimal component for emphatically emotional music listening.

MADE IN GE

The Enforcer of Order

Let's assume that you are fairly advanced in terms of quality with your hi-fi system. The components match; actually, everything sounds excellent. And now what?

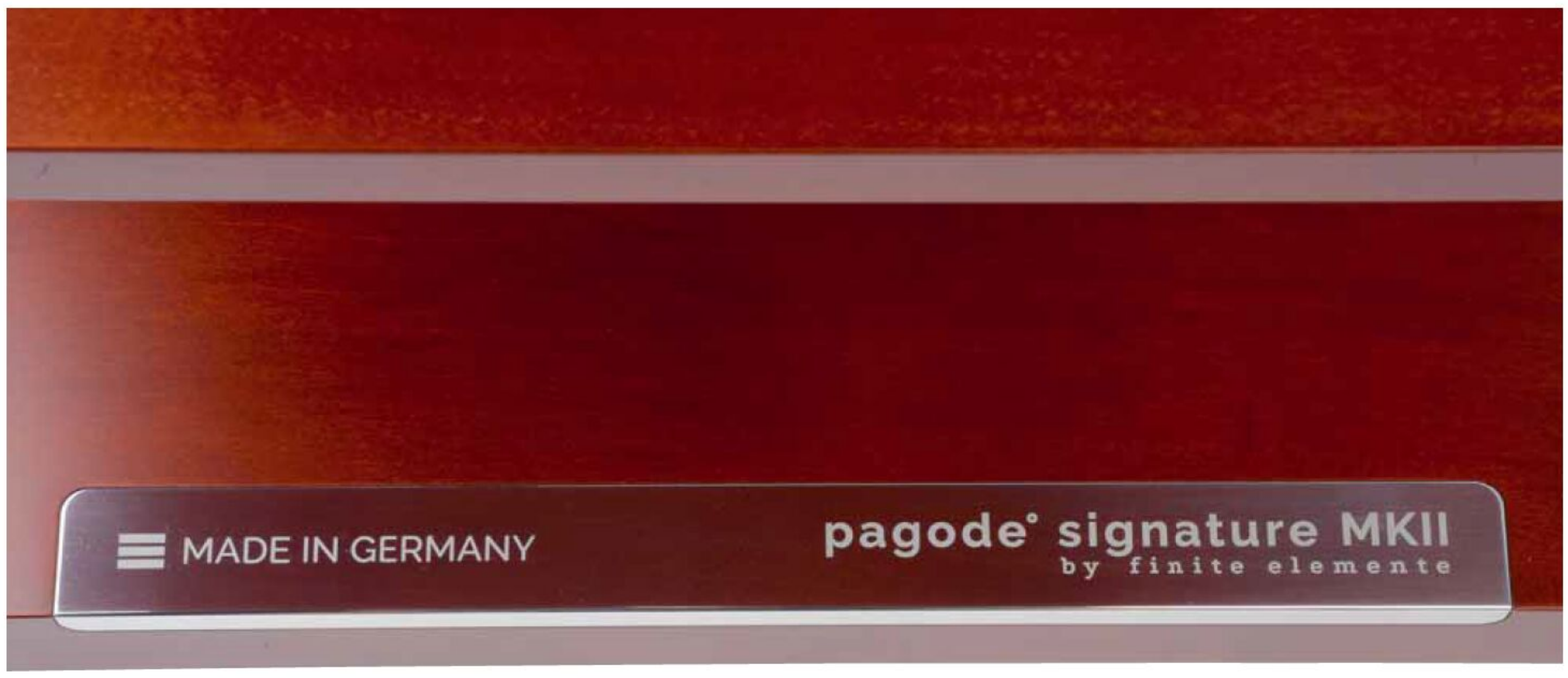
All strands optimized to the point? Mains voltage filtered in precise doses? What's left to do now? Maybe it's time to take care of the components' accommodation. It's all quite nice with the hi-fi furniture from the discounter; the birch multiplex panels screwed together using thick threaded rods worked quite well. I wonder if any other options beyond that bring about comprehensible progress.

Company history and portfolio

If anyone can provide a definitive answer, it's Finite Elemente, a company based in Paderborn in eastern Westphalia. The veterans among us will remember: they've been around long. Or rather, they've been around again for quite some time. The first incarnation of the company came to an economic end after the opening of the business field „loudspeakers." It took a while until the resurrection, but in the meantime, Finite Elemente is back in the race under the old and new technical head, Luis Fernandes. And it is doing what led to considerable success on the market back then: Creating optimum working conditions for hi-fi components.

In the first place, this means hi-fi racks, but it also includes bases and feet. There are four series of shelves, which differ in the degree of effort involved. There are no „simple" solutions among them, only those that deliver a large part of the results of the top models but only cost a fraction of those.

The Finite Elemente Pagoda Signature MKII in maximum configuration with four shelves



Rattling is part of the trade: The magnificent nameplate adorns the front edge of the lowest level

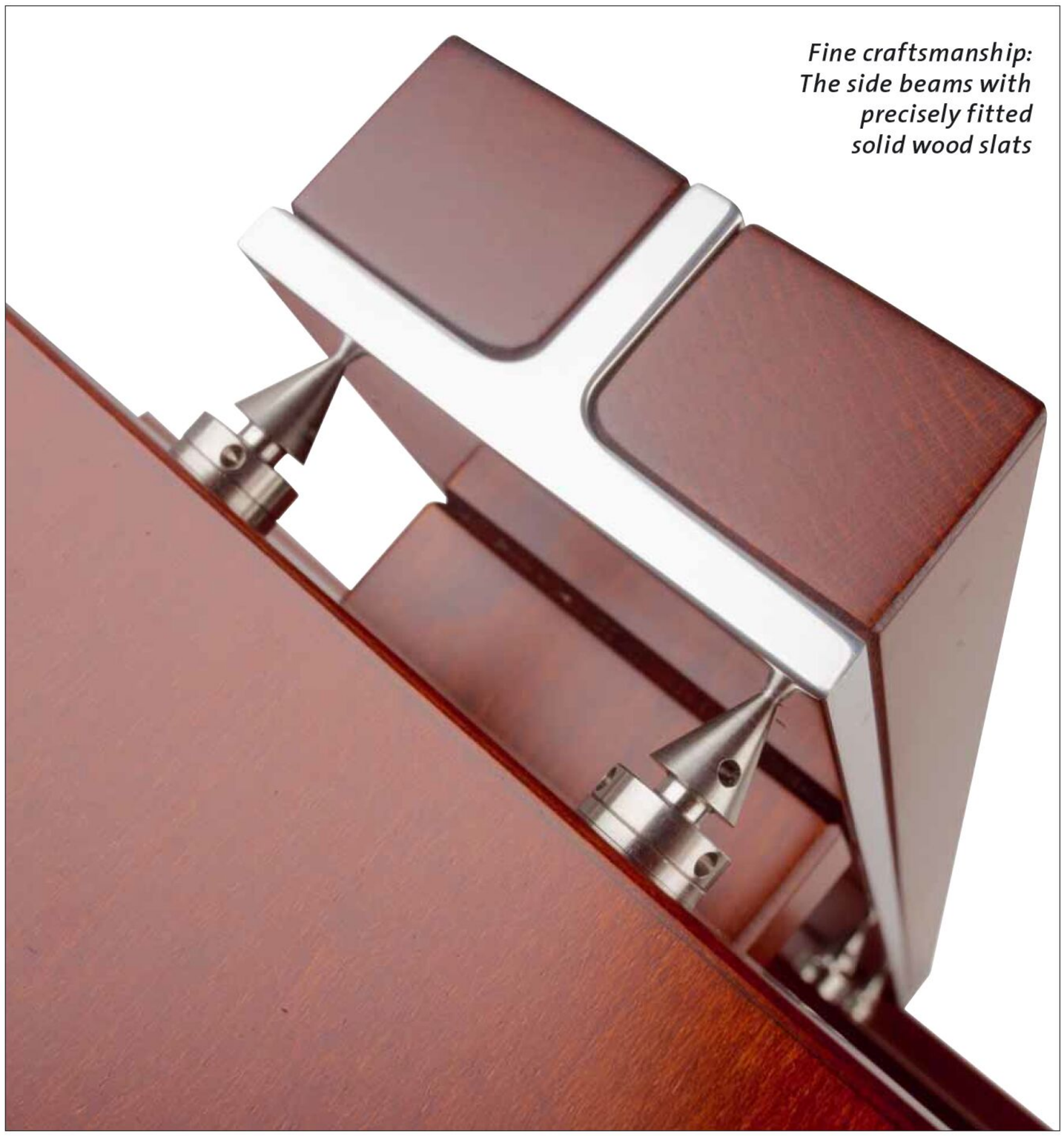
Pagode Signature MKII

And I won't hide the fact I'm happy that we're approaching the Paderborn uncompromisingness from the civilized side. In other words, the prices for the „Pagoda Signature MKII" model in question start at EUR 3,300. However, this variant has only two shelves and matt anodized aluminum side profiles. For the variant we are discussing here, you must pay around EUR 5,500.

However, there's much more to it than just a simple shelf that arranges five hi-fi components on top of each other. It starts with the unique suspension of the individual stands, which was already propagated in the company's early years. Namely, they are held on both sides by two spikes that form a force-fit connection with the side panels under high pressure. This looks delicate but proves very stable in practice: each base can be loaded with 25 kilograms. An exception is the lowest platform, which is directly bolted to the side beams and supports the four height-adjustable feet. This level can even be loaded with 75 kilograms. The second stable connection between the two side panels is formed by the cross brace located under the uppermost shelf. Combined with the bottom bracket and the two side panels, the result is a stable frame structure that can easily absorb the considerable tensile forces caused by the other shelves' clamping.

Laterals

The side panels are aluminum T-profiles loaded toward the „T-center beam." A statically lovely solution, the rack's stability proves the design right. Precisely fitted strips of Canadian maple complete the side panels. The hardwood is used for all wooden parts of the Pagode Signature



Fine craftsmanship: The side beams with precisely fitted solid wood slats

Teammates

Turntable:
· Rega Planar 3 50th Anniversary

Phono preamp:
· Audiomat Phono 1.7 MKII

Integrated amplifier:
· Krell K-300i
· Fezz Lybra 300B

Loudspeaker:
· Epos ES14N

Competitors

Furniture:
· Ikea Lack, Kallax

Monk Big Band And Quartet – In Concert

What we played

Monk Big Band And Quartet
In Concert

Dominique Fils-Aimé
Stay Tuned!

Ten Years After
Recorded Live

Ryan Adams
Heartbreaker

MKII. At this point, it causes a damping of the vibrations that are coupled to the aluminum profile via the stands. Overall, this is a brilliant construction with a clever distribution of forces.

Footprints

The most significant differences to the larger and more expensive Pagoda series can be found in the platforms for the devices. There, for example, a very interesting resonator technology is used, effectively dampening surface vibrations, similar to the enormous free-swinging suspended masses that dampen the urge to move in modern skyscrapers - but that's a topic for another story, just like the use of carbon fiber as a lightweight and very effective energy dissipator.

Nevertheless, the Signature MKII series shelves are far from plain boards. The manufacturer calls the astonishingly light decks „HCCT device levels," which means „Honeycomb Compound Technology." This means, in practice, that there is a honeycomb structure in the core, which offers very high stability despite a high air content. The whole thing is surrounded by a layer of HDF (high-density fiberboard), a harder and stiffer version of the ubiquitous

One-piece spikes with integrated floor protection

MDF (medium-density fiberboard). The outer finish is a veneer of Canadian maple - see above. This applies to all seven standard colors, and a stain provides the appropriate hue. The construction of the bottom panel is a bit different: There are two layers of honeycomb structure, with an additional multiplex board in the middle. This is necessary because it has to absorb the tensile forces of the frame construction.

The brace under the top level is crucial for the stability of the rack

AUDES

Hevenly peace with the Audes Power Conditioners

PRODUCT OF THE YEAR

Audes
ST-900

2022

TCG Handels GmbH
Döppers Esch 7
48531 Nordhron
Tel. 05921-7884927
info@tcg-gmbh.de

PRODUCT OF THE YEAR

Audes
ST-3000

2021

NEW
M-Series

Audes M-2

completely natural sounding speaker
detailed and transparent sound
high end composite cabinet
minimised vibrations
5 channel bassreflex port
integrated stand
highest quality components
special designed Audes 6,5“ woofer
1100Hz crossover frequency
best silk dome tweeter

our new standard for hous of
fatigue-free listening

Audes LLC OÜ
Pae 3a
41533 Johvi
Estonia

www.audes.ee

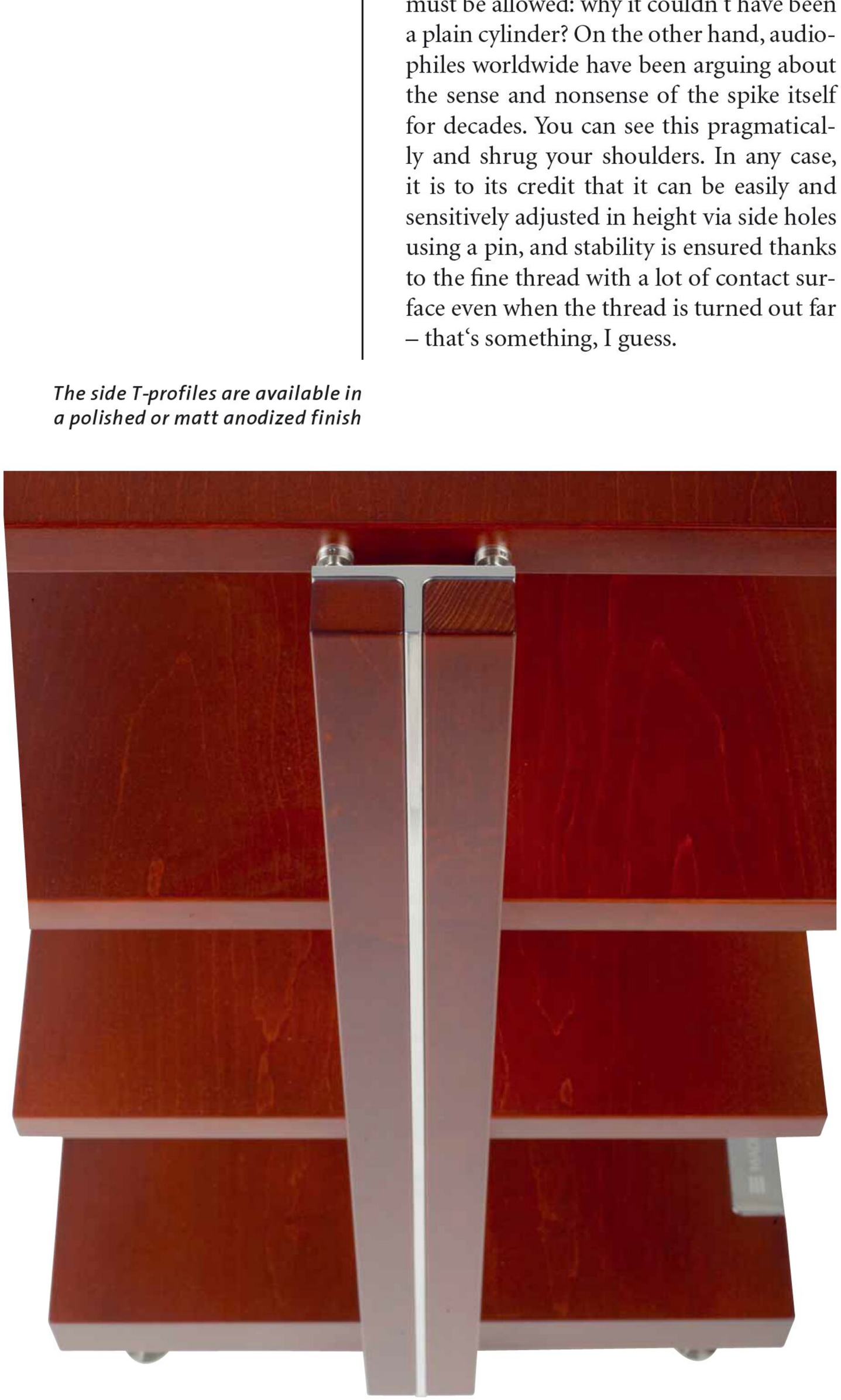
audes@audes.ee

All the way down

It remains to be clarified how the Signature MKII connects to the floor. It does so utilizing four spikes of a somewhat different kind. The stainless steel parts are spikes and spike shims in one, which means the plate is screwed onto the „thin end“ to protect the floor. This leads the „spike“ principle ad absurdum because the question must be allowed: why it couldn‘t have been a plain cylinder? On the other hand, audiophiles worldwide have been arguing about the sense and nonsense of the spike itself for decades. You can see this pragmatically and shrug your shoulders. In any case, it is to its credit that it can be easily and sensitively adjusted in height via side holes using a pin, and stability is ensured thanks to the fine thread with a lot of contact surface even when the thread is turned out far – that‘s something, I guess.

Small centering holes in the side panels determine the grid in which the device shelves can be adjusted in height

The side T-profiles are available in a polished or matt anodized finish



Sound

The listening test of a rack is relatively easy if you have a comparison model right next to it and sufficiently long connection cables. Enough „HiFi furniture“ from the Swedish discounter was also present - the perfect opponent. To make it abundantly clear: In most cases, you shouldn‘t use something like this once you‘ve noticed the differences to the Finite Elemente rack. The relatively simple Anniversary Rega turntable does the trick to show how much more air fits between Thelonious Monk and his collaborators, how much better you can guess where on stage Alvin Lee and his men were standing during the recording of „Recorded Live“ – quite impressive. The game works pretty well even with supposedly unsuspicious semiconductor electronics, as the Audiomat phono preamp featured in this issue demonstrates. The Krell K-300i integrated amplifier, which is not a slouch even „on Ikea,“ displays even more heat. Not surprisingly, tube equipment is even more grateful for the blessings of the Finite Rack. The Fezz integrated amplifier sounds noticeably more elegant and fluid here and intones Ryan Adams to howling beauty. I, for one, am immediately convinced of the blessings of the Pagode Signature MKII.

Holger Barske

Finite Elemente Pagode Signature MKII

· Price	3,300 Euro
· Distribution	Finite Elemente, Paderborn
· Phone	+49 5254 64557
· Internet	finite-elemente.eu
· Warranty	2 years
· Dimensions (W x H x D) Testmodel	660 x 1110 x 540 mm

Finite Elemente Pagode Signature MKII

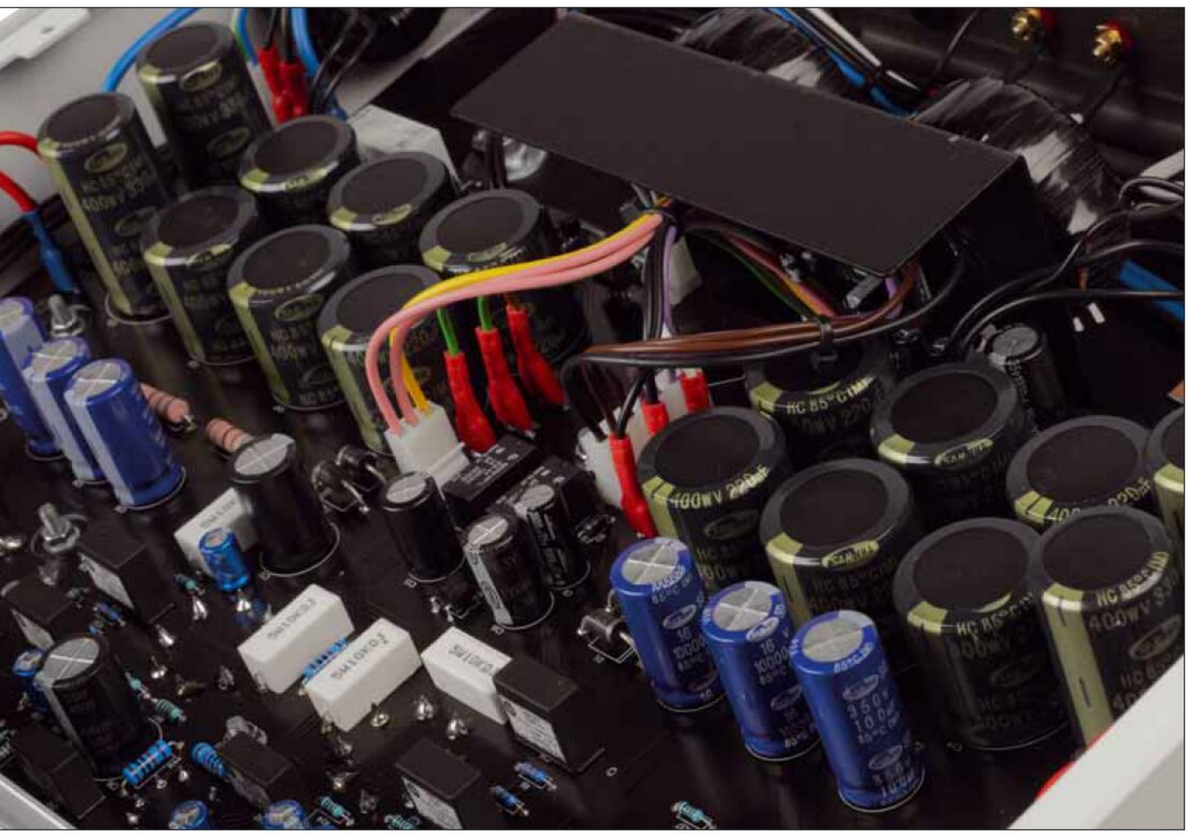
International 3/23

» I highly recommend giving "equipment storage" at the Finite Element Rack level an opportunity. You will be surprised how much sound potential there is.

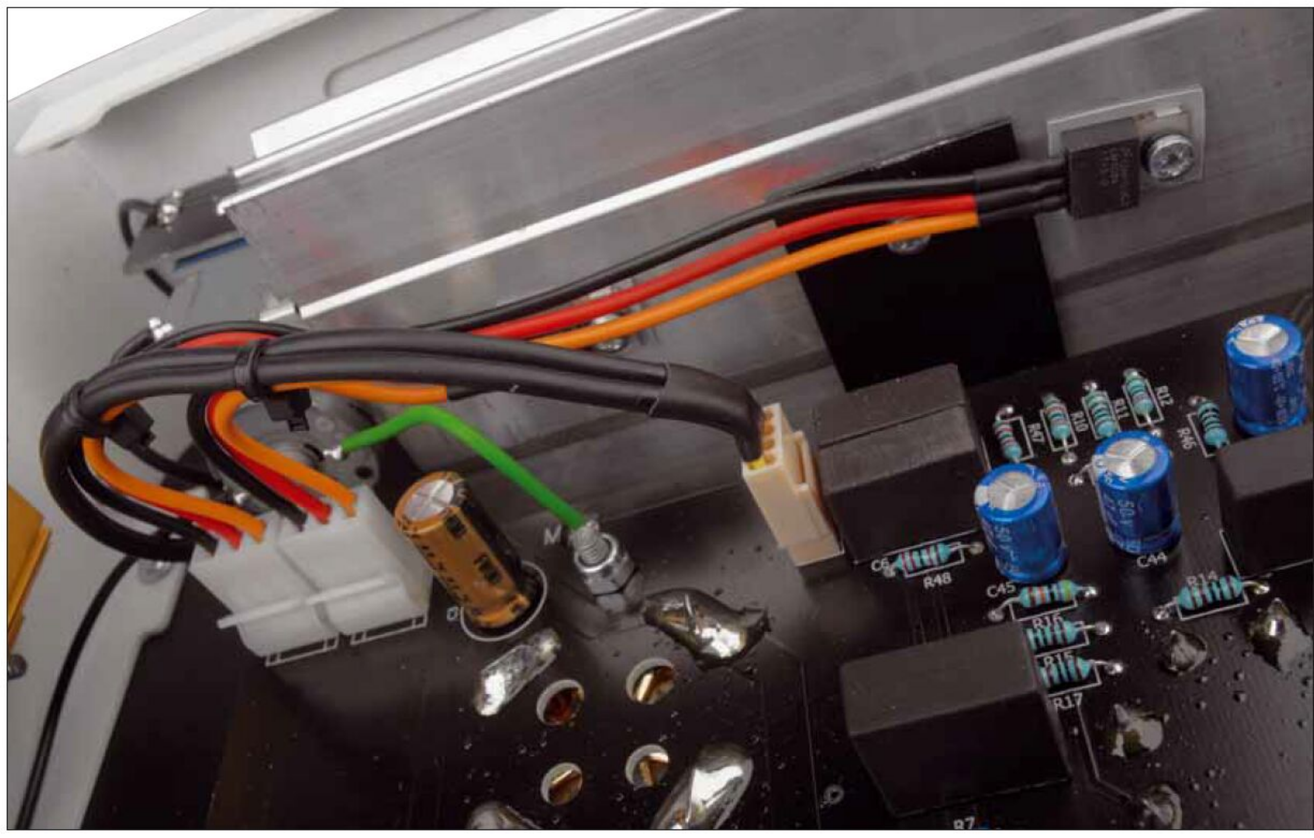
VOLUME

What Goes Around, Comes Around

We all know there are tube amplifiers in all shapes and colors everywhere. The concept of our test sample, however, is astonishingly rare.



The manufacturer puts a lot of effort, especially in the power supply



Integrated voltage regulators supply the tube heaters with DC voltage

You don‘t necessarily have to be deeply rooted in high fidelity to get an impression of the quality of the products of the Polish manufacturer Fezz Audio. Many years before the „amplifier department“ was founded in 2014, the Lachowsky brothers established a company called „Toroidy“ in the northeast of Poland, which initially had nothing to do with music reproduction but with power transformers, more precisely, with toroidal transformers, as the name suggests. Toroidy did not only supply commercial customers but also hobby electronics enthusiasts, for whom the company wound the transformer of their choice – even as a one-off. Toroidy does this to this day, and I can say from plenty of personal experience over many years that the quality here is spot-on, at very fair prices.

The cover for the tube ensemble is not a design masterpiece, but it is mandatory

Word of this fact has spread. Toroidy is nowadays a renowned supplier for private individuals and professionals in this field. At some point, the Poles wanted to show they could do more than „just“ power transformers. Enthusiasm for audio was present, so they started to develop output transformers for tube amplifiers, which brought quite different challenges than the previous field of activity. The toroidal core as the carrier medium was retained here, which does not necessarily make things easier; it is not without reason that there are not many tube amplifiers with toroidal transformers in the world. There are plenty of conventional transformers under round covers, but genuinely toroidal transformers are rare.

And it came as it was bound to happen – the desire for an in-house equipment line led to the founding of Fezz Audio. The portfolio has now taken on impressive proportions and by no means includes only tube amplifiers. There is also a whole range of semiconductor equipment. And, listen and be amazed: six different phono preamplifiers. There are two series of tube amplifiers: the more traditional „Legacy“ units and the somewhat more modern „Evolution“ models.
We - to finally turn to the subject of this article - deal with the Lybra 300B Evo, a model positioned relatively high up in the hierarchy at 4,950 EUR in the basic version.

Teammates

Turntable:
· TechDAS Air Force III / Reed 3p

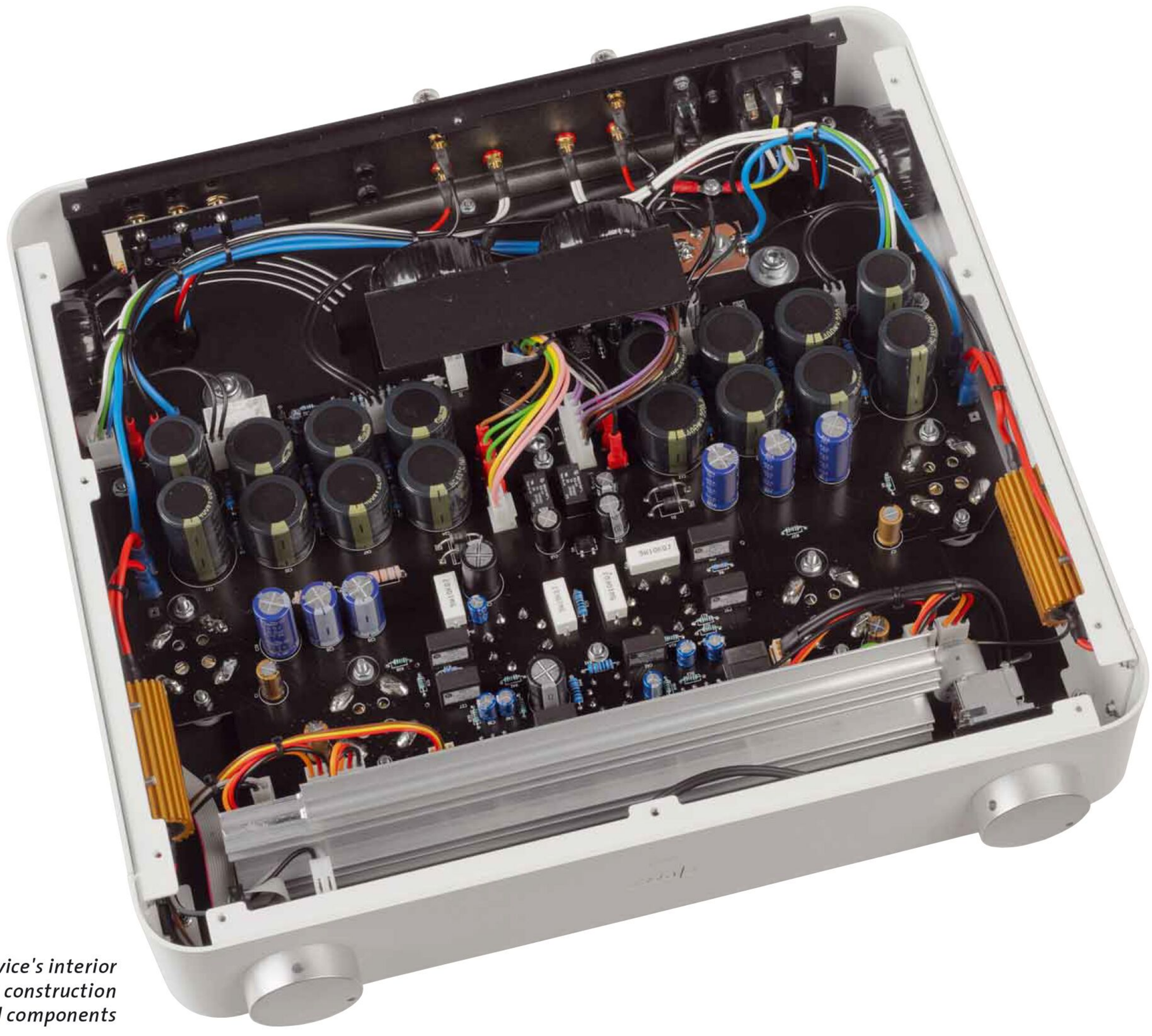
Pickup Cartridge:
· DS Audio DS-003

Phono preamp:
· DIY

Loudspeaker:
· Thivan Labs Eros 9 Ultra
· DIY Focal / JBL
· Klang + Ton Ella

Competitors

Integrated amplifier:
· Thivan Labs 811 Anniversary



The device's interior reveals a clean construction with good components

The Strokes – Comedown Machine

What we played

The Strokes
Comedown Machine

Anette Askvik
With Every Cell

Leonard Cohen
You Want It Darker

Pat Metheny & Lyle Mays
As Falls Wichita,
So Falls Wichita Falls

Configuration

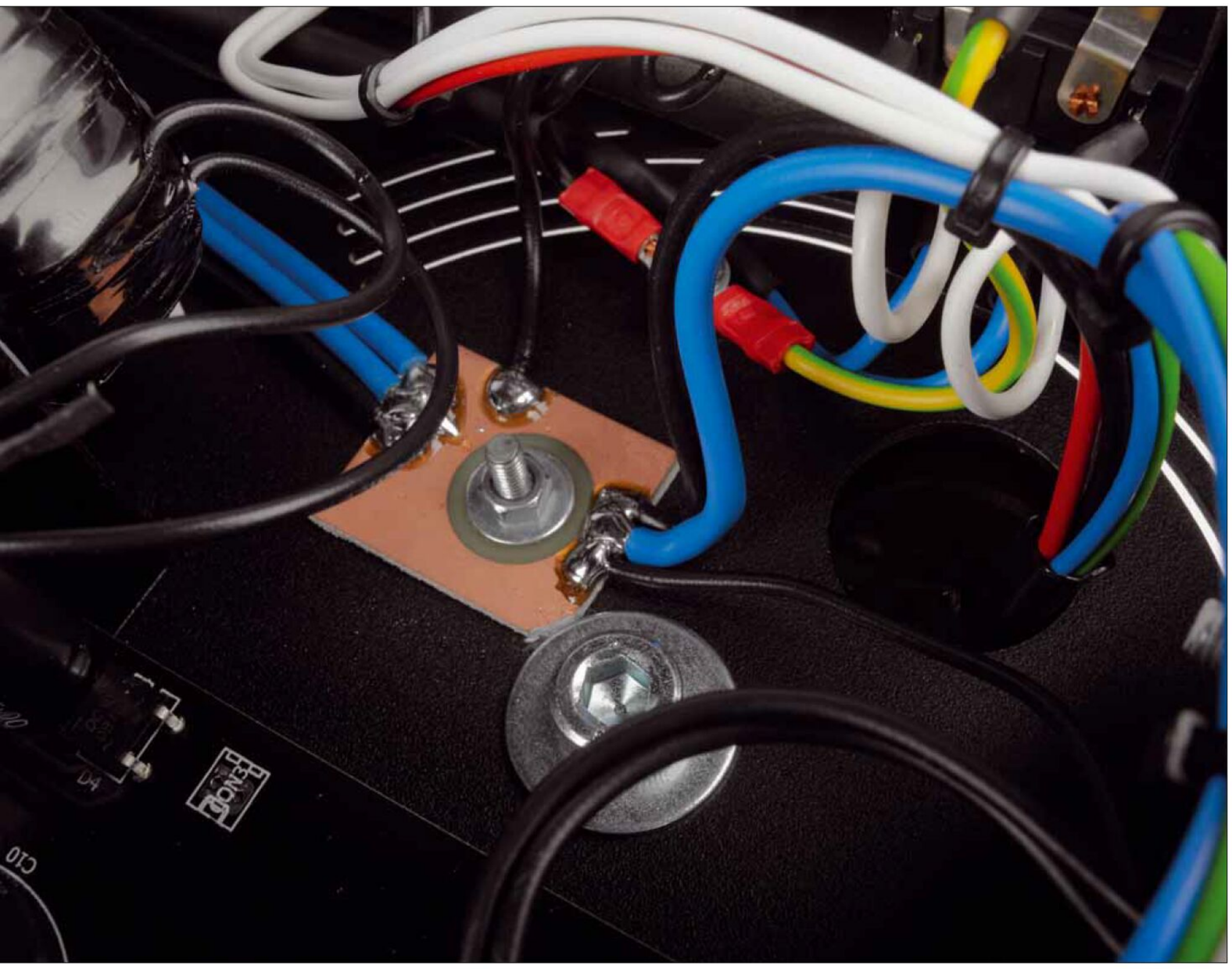
The Lybra 300B is a single-ended amplifier based on the mother of all audio power tubes, the 300B, from which you can realistically get maybe six watts of output power if you don‘t want to stress the tube unduly. This is not excessive and requires a lot of care when selecting the speakers to be connected to it. If you want to indulge in the magic of a 300B and drive a typical transducer with less than 90 decibels of efficiency, you need a special device like this one. Here, two of the illustrious tubes in the beautiful coke-bottle design are used per channel, which do not work in a simple push-pull mode but in parallel, resulting in a proper 15 watts at the output, but does not compromise the holy grail of single-ended triode operation in any way.

Appearances

With its gently rounded corners and tidy front panel, the 300B Lybra looks decidedly modern, especially in the white outfit (which has to be paid for with an extra 100 EUR).

Two rotary knobs determine the picture. One switches between the three inputs, and one is responsible for the volume. The power switch is located on the back of the device – not very practical, but still widely used.

If you want more features, you can order a Bluetooth 5.0 module for an extra EUR 250, and for more complex applications, there‘s a preamp output or power amp input for another EUR 250. A total of seven housing colors are available. Black or silver is standard. A cover grille with an acrylic glass front that can be slid on from the front is included in the scope of delivery but should remain in the box in most cases. Who wants to block the view of the quartet of beautiful Psvane 300Bs?
An ECC83, which takes care of the voltage amplification on the input side, and a 6SN7 per channel, which takes care of the driver tasks, support the noble power tubes. Three transformers reside at the rear of the driver - round ones, of course. The one in the middle is responsible for the power supply, and the two on the outside are the output transformers.



A small piece of board material serves as the central ground point. Simple but effective

Innards

But that‘s not enough about toroidal cores: Inside the device, two more copies come to light, which probably function as chokes for the high voltage. The Lybra 300B‘s construction is modern, with plenty of electronics on the large circuit board. The manufacturer invested in a sophisticated power supply with plenty of filter capacity; the heating voltages are even electronically stabilized. The component quality is high; the coupling capacitors come from the Polish manufacturer Miiflex, an acknowledged high-quality supplier.
The user has nothing to do with the quiescent current setting of the power tubes; an auto-bias circuit does this. Which is a fine thing should you need to replace the power tubes at some point. The volume potentiometer is the inevitable Alps motorized pot, which can be operated not only by a knob but also with the included, pretty remote control.

Various plugs on the back panel are reserved for options subject to extra charge

In terms of build quality, the device is without fault: No sharp edges, excellent surface quality, and a confidence-inspiring 23 kilograms of total weight.

Sound

The device needs a few days on the mains, during which it discreetly plays along. Straight out of the box, the quad drive does not ignite yet but spreads well-groomed boredom. Let‘s give it a bit more time ...
And lo and behold – at some point, it works out with the Thivan Labs Eros 9 Ultra, which, as a classic representative of the „cardboard plus horn“ guild, should be exactly the correct caliber for such an amplifier on paper. This is also the case, as it quickly turns out. The Strokes classic „Comedown Machine“ is playing. Although certainly not an audiophile highlight, the lively fifth album by the Americans quickly shows that the Fezz has developed a decidedly lively nature, follows the slightly noisy tenor of the album around every abstruse corner, and sounds bouncy and relaxed. Level reserves? Why, yes. Okay, this one‘s coming home with me. It turns out that the machine also copes perfectly well with my standard three-way speakers. Compared to the tried and true Thivan Labs 811 Anniversary, the Fezz sounds more agile, not quite as substantial, with an

Signals are switched by relay directly at the input sockets

Two toroidal chokes act as screening for the high voltage

even more vibrant vocal reproduction. The latter makes Anette Askvik's organ seem almost dramatic, which one would otherwise not expect from the delicate little voice. Leonard Cohen shows what happens when 300B sound snaps into place: Percussive sounds sound dry as dust, vocals clear as a bell and natural, pure music reigns. The Fezz comes across as disciplined, quick-witted, focused on the essentials, and yet beautiful – grand class.

Holger Barske

Measurements

Lab commentary

The frequency response of the Fezz amplifier shows that the Polish can build transformers. There is almost no drop down to 20 hertz. At the top, we are only at -2 decibels at 50 kilohertz, and in between, there is perfect linearity. That's how it should be. At one watt into eight / four ohms, the unit delivers a signal-to-noise ratio of 81.4 / 84.6 decibels (A), a channel separation of 61 / 62 decibels (A), and a distortion factor of 0.17 / 0.16 percent. The output line at three percent harmonic distortion is a good 13 watts and at five percent, 15. The current consumption is a constant 237 watts.

The Lybra 300B Evo belongs to the rare species of parallel single-ended amplifiers

Fezz Lybra 300B Evo

· Price	4,950 Euro
· Distribution	Audium, Berlin
· Phone	+49 30 61347405
· Internet	vertrieb.audium.com
· Warranty	2 years
· Dimensions (W x H x D)	420 x 226 x 380 mm
· Weight	approx. 23,5 kg

lp

Fezz Lybra 300B Evo

International 3/23

» A truly wonderful amplifier that brings the magical virtues of a 300B to a wider audience – thanks to a practical 15 watts.

A True Golden Boy

Few cartridge manufacturers can claim to have made such a rapid start on the German market as Skyanalog. And the next coup of the specialists from the Far East is already here: a veritable reference MC.

Skyanalog
REF

Teammates

Turntable:
· TechDAS Air Force III

Tonearms:
· Reed 1X
· Reed 3P

Phono preamp:
· Clearaudio Balance Reference Phono

Preamplifier:
· NEM PRA-5

Active crossover:
· JBL 5235

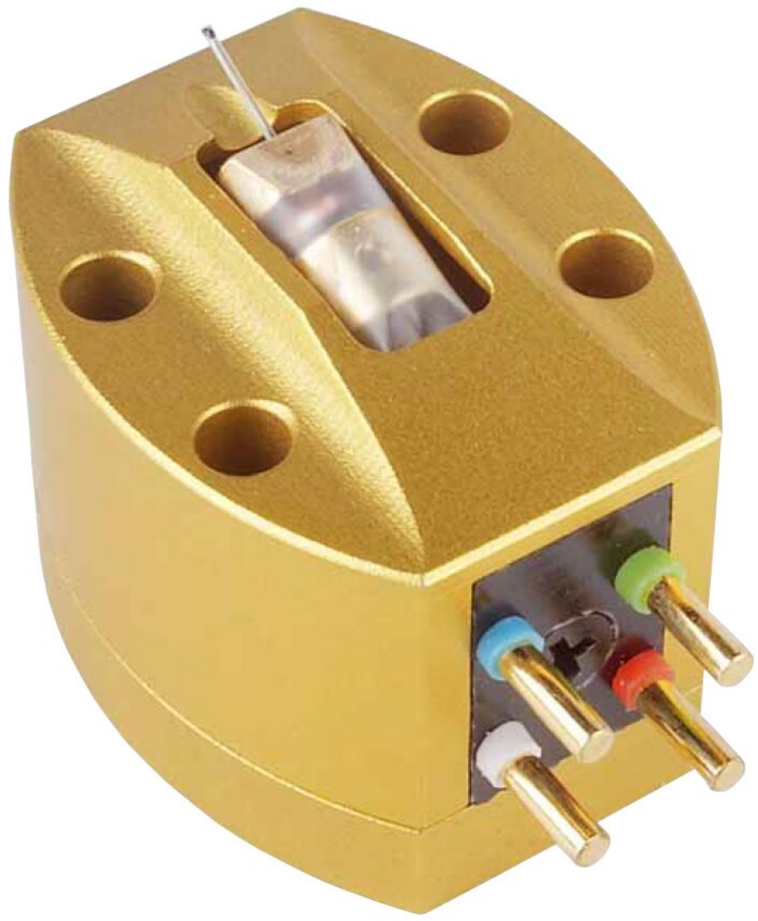
Power amplifier:
· Pure Dynamics Class-A Monos
· Yamaha P-2200

Loudspeaker:
· JBL 4355

Competitors

Pickup Cartridges:
· Benz LP-S
· Skyanalog G1

And it makes no secret of its claim: It is also appropriately called „Reference." Sometimes just „Ref"; Skyanalog doesn't seem quite sure yet. What they want to tell us with this, however, is entirely out of the question: This is it, the culmination of all the experience gained in cartridge construction to date, the big one, the one at the top of the price list. And the price list notes 2950 EUR. Now, that's certainly a lot of money for a wear part like an MC cartridge, but it fits into the structure of the manufacturer's other products. The G3 model below it – which has already given us a brilliant performance – currently costs 2100 EUR. And in this environment, it is almost reassuring that the manufacturer has refrained from arbitrarily gold-plating the prestigious in-house reference model in terms of price.



Solid metal housing, refined generator: Skyanalog has put much effort into the Reference

Body

The body of the top model, on the other hand, is gold-plated. It is made of a rigid aluminum alloy, just like the housings of the models on this side. Its design is part of the sound-wise progress the manufacturer claims to have achieved compared to the smaller models. The aluminum armor consists of two parts that are quadruple-bolted together, and surprisingly, I managed to resist the temptation to disassemble it. At 12 grams, the Skyanalog Reference's weight is modest. The manufacturer could improve the finish a bit, as there are still some machining traces on the case. However, this may also be because we are dealing with a very early model. On the side facing the headshell, the body bears its origin („Made in China"), not without pride, and a serial number is also immortalized here.

Packaging? Befitting its status: solid oak

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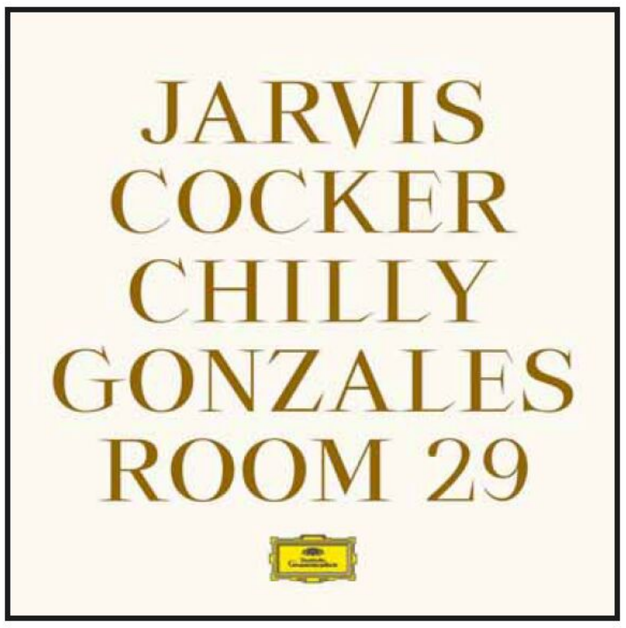


Jarvis Cocker / Chilly Gonzaels – Room 29

What we played

Jarvis Cocker / Chilly Gonzaels
Room 29

Walcott / Cherry / Vasconcelos
Codona II

Hubbard / Turrentine
Concert

Tool
Fear Innoculum

Tracking system

Let's get to the „business end" of the Reference. And here you can undoubtedly see that we are dealing with a cartridge with high standards: A milky-white stylus cantilever, which is made of sapphire, just like the G3, protrudes from the body. This mineral has a Mohs hardness of nine and is only surpassed by diamond. Hardness is essential for a stylus cantilever since it should transmit the deflections of the diamond to the coils to be moved without delay or distortion. In the Reference, a micro-ridge diamond with rounding radii of five and 80 micrometers sits at the front end of the sapphire rod, which is even sharper than in the G3. We are pleased that the stylus cantilever sticks straight out of the generator. The cleanly bonded diamond also sits perfectly perpendicular to the sapphire rod, so azimuth problems are not expected.

Generator

Skyanalog builds the Reference from selected generator components. This is the only way to achieve consistent quality across the series and ensure channel uniformity. The manufacturer specifies an output voltage of 0.35 millivolts at a speed of 3.54 cm/s, which should amount to just under 0.5 millivolts at the more common 5 cm/s – so enough output voltage is available. The internal resistance of eight ohms fits. Obviously, a bit more wire is wound onto the pure iron carrier than in the extreme MCs, which have a much lower resistance.

Mechanicals

With needle compliance of 12 µm/mN, the rigidity of the suspension is in the medium-hard range, which should ensure compatibility with many tonearms. The recommended tracking force is 17 millinewton.

The sapphire stylus cantilever is equipped with a sharp micro ridge diamond

Installation

The installation of the Far Eastern gem in the Reed 1X turned out to be unproblematic. The housing's straight front edge is ideally suited for cranking adjustment; the diameter of the color-coded connector pins is in the upper range of the ordinary so that proper contact is guaranteed even with connector plugs „with a history."

Sound

Let's start very slow and relaxed. In this case, Jarvis Cocker and Chilly Gonzales were responsible for that, trying to impress with their famous hotel room recording „Room 29". Which went quite thoroughly wrong at the beginning: Fresh from the factory, the Skyanalog Reference sounds rather unimaginative and bitey. After it had passed the ten-hour mark, a completely different picture revealed itself. First, I increased the termination impedance from 100 to 500 ohms because the scratchiness in the presence region had disappeared. And my dear friends, the Reference now shined: Super-smooth piano notes with a lot of texture, an incredibly realistic voice reproduction with just the right amount of „hotel room mustiness." Finely pronounced sibilants, everything perfectly positioned in the center - awe-inspiring. This is definitely on par with the Benz LPS used for comparison. The latter sounds perhaps a touch more precise but doesn't quite have the warm commitment of the Skyanalog. The Reference plowed through the dense soundscapes of the ECM classic „Codona II" similarly easily. Here, Nana Vasconcelo's diverse percussion repertoire seemed a bit too chubby, which I easily corrected with a slight VTA adjustment; the 1X now plays just under two millimeters higher at the rear. The Reference's superfine and dignified character remains unaffected. This is a true connoisseur MC and not one of those super-precise resolution monsters. The pace sometimes reminds me a bit of the big Ortofon MCs with Replikant 100 diamond, and I mean that as a big compliment.

Holger Barske

Skyanalog Reference

- Price 2,950 Euro
- Distribution TCG GmbH, Nordhorn
- Phone +49 5921 7884927
- Internet tcg-gmbh.de.de
- Warranty 2 years
- Weight approx. 12 kg

lp

Skyanalog Reference

International 3/23

» The big Skyanalog rightly bears the name Reference: It sounds immensely fine, soulful, and emotional and reproduces moods and voices with dedication and a perfect sense of proportion. An excellent cartridge!

The Power Case

You love tube amplifiers, but your speakers are no efficiency wonders? Then this might be just the proper amp for you.

It is indeed not our first encounter with amplifiers of the Qualiton brand and corresponding test reports. Nevertheless, I'll take the liberty of briefly outlining the company's history: Audio Hungary - the name of the parent company – was founded in Hungary in the 1940s and has been manufacturing electronic components of various kinds ever since. With the label „Qualiton," Audio Hungary has created a brand reserved for high-quality consumer electronics for home use. Which in practice boils down almost exclusively to tube amplifiers. The range is essentially divided into a „Classic" and an „A" series, the latter being the higher-end one, to which our present test subject also belongs.

The A75 tube integrated amplifier, priced at EUR 6900 and up, is a real gem of engineering, and, despite notable amounts of output power, it's not a giant ship that dominates the entire living room: at 35 centimeters wide, it falls into a category that used to be called „midi hi-fi" – one step narrower than the standard 43 centimeters. The device's compactness shouldn't blind you: We are dealing with a hefty 21 kilograms of technology. They are wrapped in a metal casing, and the silver-colored version pictured here is 900 EUR more expensive than the black standard version.

Compact and very attractive: the A75 from Qualiton

The construction of the device is once again without fault and blame

Teammates

Pickup Cartridge:
· DS Audio DS003

Turntable:
· TechDAS Air Force III / Reed 3p

Phono preamp:
· DIY

Loudspeaker:
· Epos ES14N

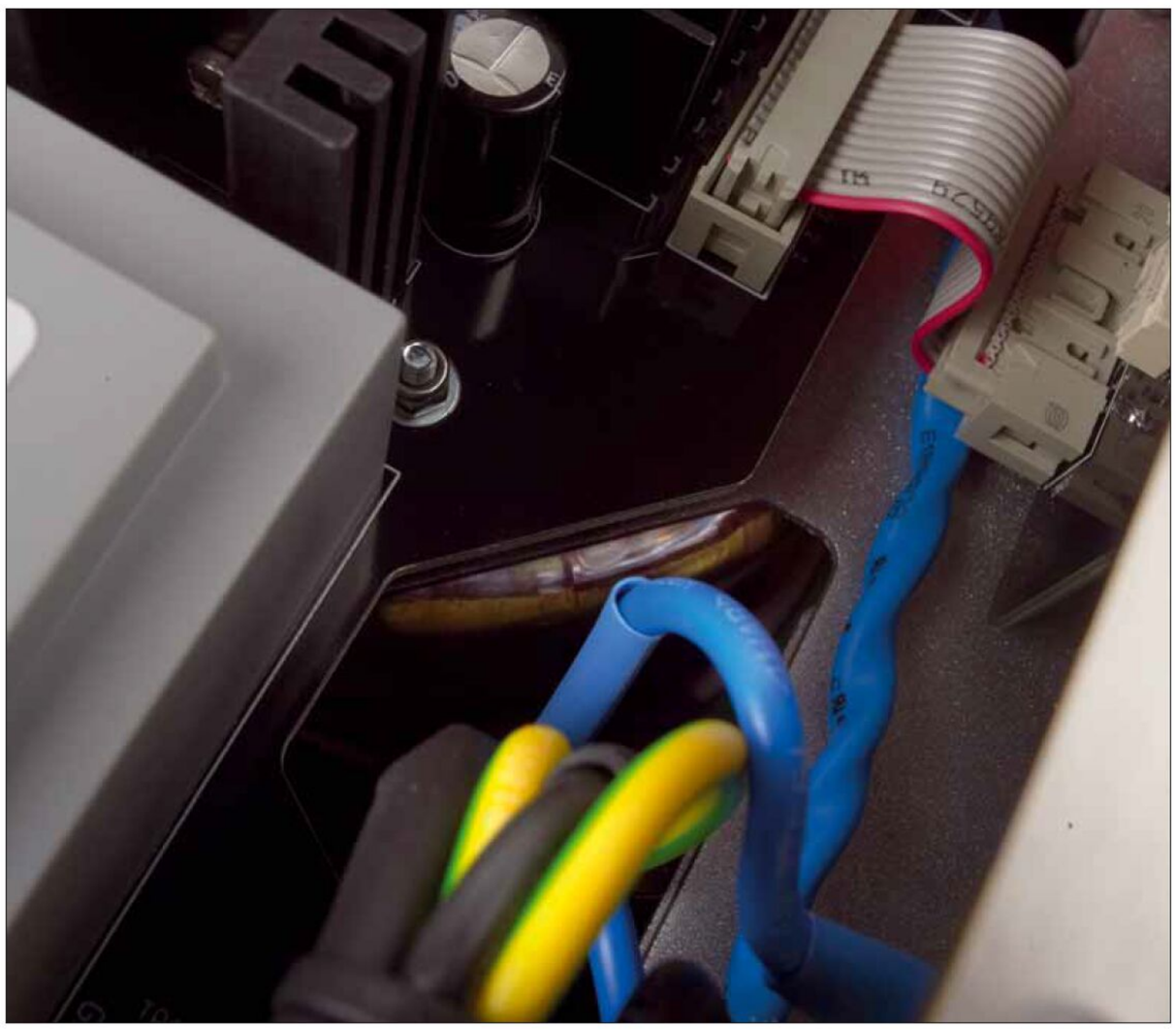
Competitors

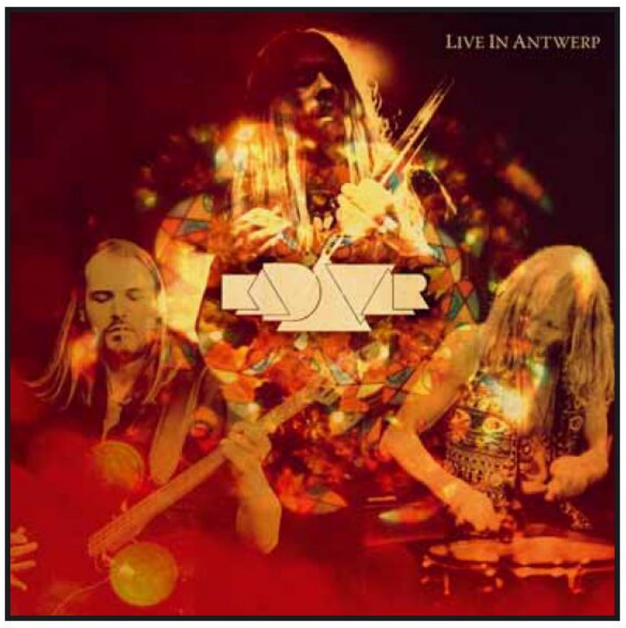
Integrated amplifiers:
· Rega Elicit MK V
· Thivan Labs 811 Anniversary

Toroidal transformers operate under the shielding hood as mains and output transformers

Variations

The promised 75 watts of output power per channel are entirely feasible without any problems due to the weight of the output transformers. The device can be equipped with the three popular Beam Power tetrodes KT120, KT150 or KT170. The distributor provided our test unit with the KT150, which I am a big fan of. To this day, I fondly remember my time with an Audio Research Reference 75SE power amplifier, whose sonic fervor and tremendous punch I still remember. I consider the KT 150 the best and most stylish tube in the series, but that is a highly emotional subject on which you are welcome to have a different opinion. By the way, nothing changes regarding performance with different end tubes. The





Kadavar – Live in Antwerp

What we played

Kadavar
Live in Antwerp

Walcott, Cherry, Vasconcelos
Codona 2

Nina Simone
At Carnegie Hall

Anouar Brahem
Blue Maqams

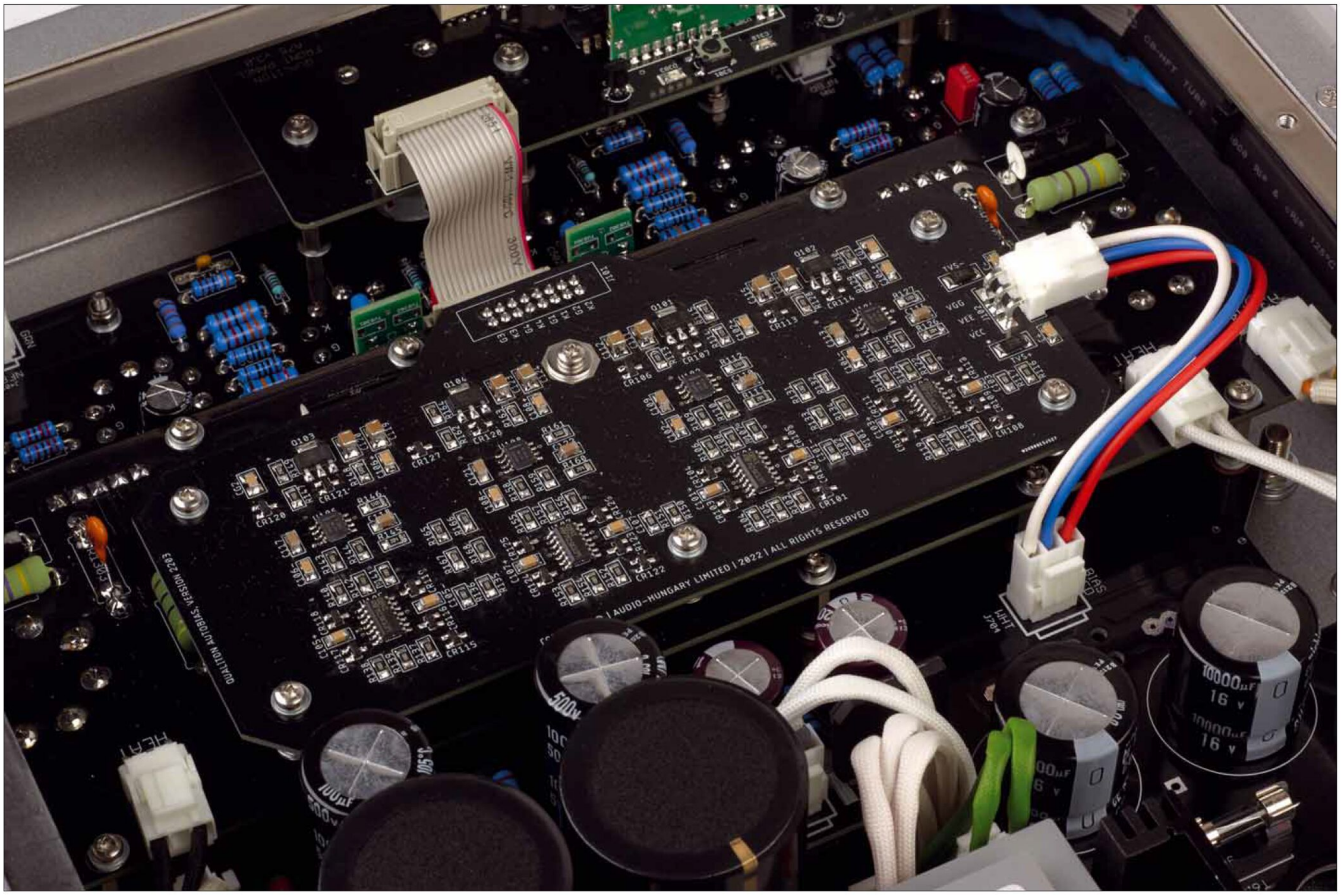
larger models theoretically run a bit less stressed in the A75 than the KT120, but on the other hand, even those are far from being stressed at 75 watts. If you want the KT150, you have to add 200 EUR, and the KT170 costs 400 EUR extra.

From the outside

The front of the A75 is a tidy affair. The volume control is in the center, with a button on the right to switch through the four inputs. Four LEDs indicate which one is currently active. On the back is the corresponding connection panel. One of the four inputs is even symmetrical; three are RCA connectors. There are binding posts for four- and eight-ohm speakers, and on the back of the one-piece transformer housing is a block diagram of the device – this has already become a Qualiton tradition. Of course, a cover grid for the tubes is included, but it didn't make it to me.

One of the two types of tubes in the front end: ECC81 from Electro Harmonix

Makes life easier for the power tubes and the users: the Autobias board



Technology

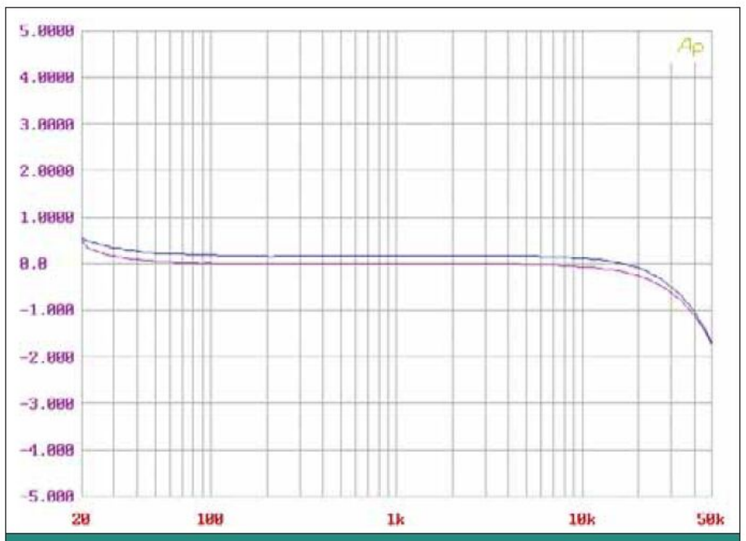
By the way, changing the output tube is a rarely simple matter. Apart from reconnecting the tubes, you don‘t have to do anything. The reason manifests immediately after removing the bottom plate: The device has a modern quiescent current control, which also silently handles the adjustment to different output tube types in the background. The user also has nothing else to do with „bias“ – very convenient.
As expected, the assembling of the device is a decidedly neat affair. That is not surprising because that is generally the case with the Hungarians. The amplifier circuitry turns out to be more complex than, for example, the Model X200, which we presented here two years ago. This is due to the manufacturer‘s efforts to build a low-distortion device – which worked out well since the distortion values of the A75 are decidedly low for a tube amplifier over the entire output power range. This required three dual triodes per channel for preamplification, phase splitting, and driver duties. These tubes are also heated with stabilized DC voltage. Output and power transformers are loadable toroidal types and unconditionally designed for operation with the KT170, the most current-hungry output tube option. All transformers are wound in-house by Audio Hungary. The A75 is the first product of a new amplifier generation based on the A50i model. The circuit layout has been significantly optimized compared to the X200, which is evident in reduced considerably overall noise, among other things.
Technically and visually, we are dealing with an all-around accomplished amplifier – now, it just has to show what it can do in practice. Again, I chose the fantastic Epos ES14N loudspeakers, which are becoming my favorite „real world“ speakers. And they cut an excellent figure at the Qualiton‘s eight-ohm terminals.

Also present: ECC83 from Sovtek

FINK team
BORG
EPISODE 2
FINKTEAM.COM
Couldn’t be better?
WELL, WE MASTERED IT.
FINKTEAM, MAXSTRASSE 75, 45127 ESSEN, GERMANY, TEL: +49 (0)201/236412, INFO@FINKTEAM.COM, WWW.FINKTEAM.COM

The combination pampered us with loads of timbre and emphasis, a soundscape with an almost American opulence. The Berlin stoner band Kadavar released their first live album recorded in Antwerp about ten years ago. It turned out to be a perfectly suitable fare for the combination: frontman Lupus Lindemann lets his SG sing, the crowd goes wild, and the place is on fire, with astonishingly excellent spatial imaging and real pressure – great.

The ECM classic Codona 2 was at least as impressive. In particular, percussion legend Nana Vasconcelos releases rhythmic fireworks at the listener in a highly entertaining manner. Again, an opulently spacious imaging stands out. Color is also in abundance with Nina Simone. The zeal with which she performs „Black Swan“ is something special. It‘s easy to forget that we‘re „only“ dealing with a loudspeaker with a seven-inch woofer; what hits the listener here sounds like much more cone area. The Hungarian amplifier makes the performance a hell of a lot of fun – I‘m impressed.

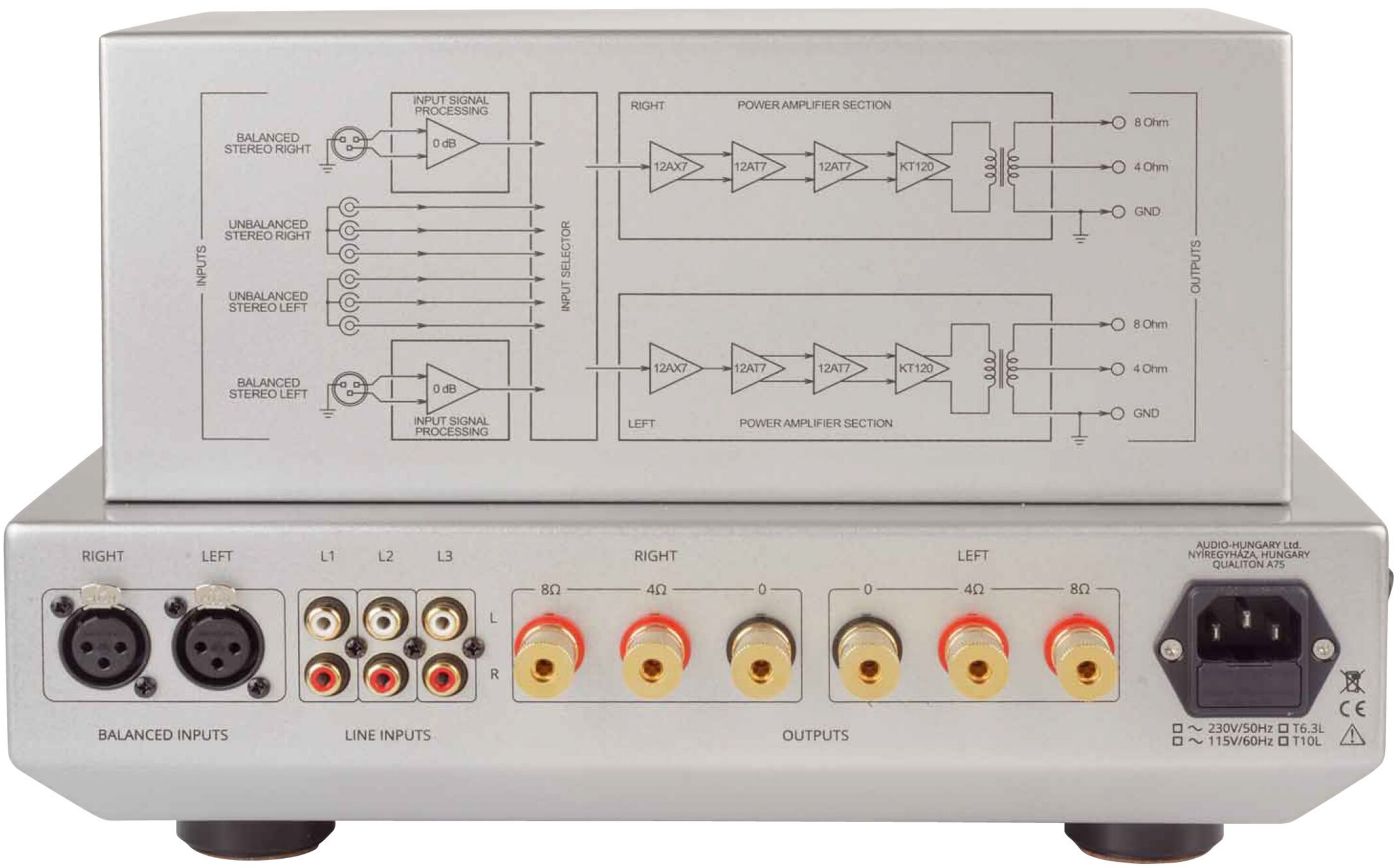


Measurements

Lab commentary

The Qualiton also performs impressively in the lab. It proves to be broadband. The upper cutoff frequency is just below 100 kilohertz. The only conspicuous feature is that the overall gain is relatively low. The device wants to be driven with just under two volts to reach the total output power. At one watt into eight ohms, the signal-to-noise ratio is an excellent 91.7 decibels(A), and the channel separation is 76 decibels(A). Distortion is an excellent 0.02 percent, and maximum output power is 73.6 watts. At four ohms, the picture changes only minimally.

Holger Barske



Block diagram on the back of the device – a nice gimmick

Qualiton A75

· Price	6,000 Euro
· Distribution	LEN HiFi, Duisburg
· Phone	+49 2065 544139
· Internet	lenhifi.de
· Warranty	2 years
· Dimensions (W x H x D)	350 x 220 x 420 mm
· Weight	approx. 21 kg

lp

Qualiton A75

International 3/23

» The A75 is a magnificent integrated amplifier with temperament, fieriness, and a penchant for spectacular stage imaging. It's not an entirely inexpensive treat, but definitely worth a sin.

Pan-European Finesse

There are many reasons to look for a lifetime speaker. For this, you might look toward Prague, where they make some very delectable speakers.

A gem, and there is no reason in this world to choose other than the in-house stands

Lovable

When I wrote about the Xavian Perla Esclusiva, which is placed below the Ambra Esclusiva in the hierarchy, in the HiFi review, my introductory words were clear. I'll gladly repeat them: „If you find reading a test about a small two-way speaker boring, I recommend this one to you. Because you almost have to like the Xavian Perla Esclusiva." For this review, I would like to change my intro at one point and delete the „almost" because you have to like the larger Ambra Esclusiva. I'd like to clarify why.

A look at the quality of craft: such pieces you pass on to your children

The bass reflex opening is designed as a slit in the baffle below the woofer

Teammates

Turntable:
· Transrotor Massimo Nero

Tonearm:
· Transrotor Studio 12

Pickup Cartridge:
· Transrotor Figaro

Integrated amplifier:
· Accuphase E-5000

Phono preamp:
· Musical Fidelity NuVista 800

CD player:
· Accuphase DP-570

Competitors

Loudspeaker:
· MoFi SourcePoint 10

Paneuropean roots

Company boss Roberto Barletta moved from Italy to Prague in 1994 at just 23, where he founded Xavian a few years later. So, how did he come up with this quirky name? Xavian is of Basque and Arabic origin, derived from the Spanish place name Etxabier for „new house.“ The Arabic meaning is „intelligent.“ Okay, that makes sense. Barletta wrote me, „Xavian is, in a way, a family business because most of my colleagues have worked for me for a long time, some for over 20 years. I think of them as artists, like the ancient Greeks. They love their work, and they are the heart of the company. Together, we have survived the Czech financial crisis of 1998, the World Bank crisis of 2008, and some factory relocations. Yes, I am happy because I do what I like; I still play like a child.“ There can hardly be better conditions for great quality products.

The drivers of the Ambra Esclusiva almost seem like intruders in this incredibly well-built wooden body

Mark Hollis – same

What we played

Mark Hollis
same

The Modern Jazz Quartet
Germany 1956 & 1958

Domenico Scarlatti
Complete piano sonatas / Christoph Ullrich

Fleetwood Mac
Rumours

Eagles
The Very Best Of

As we are used to from Xavian, the large dome comes from their in-house manufacturing. It sounds excellent

Evolutionary history

The idea for the Ambra was born in 2016 as a successor to the smaller Perla. Initially, Roberto used an AudioBarletta polypropylene woofer and a 1-inch AudioBarletta soft dome. For this, you need to know that Barletta develops all the drivers and has been manufacturing them for more than five years. Under the name „AudioBarletta," he also manufactures voice coils, surrounds, suspension, magnets, or copper parts for other companies as OEM goods. He still buys the cones from Kurt Müller in Krefeld - until he can perhaps do it too.
The new Ambra Esclusiva has received new drivers compared to the first series. Barletta has replaced the polypropylene cone of the woofer with a curved paper cone with a phase plug. Paper here simply gave him the extended, linear frequency response he wanted, resulting in greater detail. In exchange, he gave up the self-damping aspect of polypropylene, which Barletta says provides perfect roll-off. He uses a copper sleeve to cover the pole core to short-circuit the voice coil's self-induced currents, linearizing impedance and minimizing distortion. The voice coil former is made of a non-conductive material because he wanted to achieve a high Qms value. The previous 1-inch dome was replaced by a 1.1-inch diameter model with a custom cone by Kurt Müller. The larger dome offers greater extension in the midrange, can be coupled deeper, and generates fewer distortion thanks to its larger radiating surface.

Cabinet construction

The case of the Ambra Esclusiva is made of 19 mm thick oak panels manufactured in the Czech Republic and carefully assembled and glued with special inserts. Barletta wrote, „As you probably know, Venezia is built on oak pylons. Oak is an incredibly sturdy and durable wood, more reliable than walnut, which we've used in the past."
I didn't know that, but what is certain is that beautifully crafted speakers like the Perla Esclusiva usually come from northern Italy. The all-wood cabinet is visually striking because of its rounded edges, which primarily refract reflections. Between the tweeter and the low-midrange, Barletta uses glued reinforcements to further increase the strength of the wood at that point. He found that otherwise, coloration could occur, damaging the transparency.
The rear and side walls are damped with self-adhesive bitumen plates of 4mm thickness. They are also covered by a 10mm thick textile layer, which provides most of the sound attenuation in the low middle frequencies. In addition, it also uses polyurethane foam and polyethylene textile fleece. These different types of damping are supposed to absorb internal vibrations particularly effectively, which I like to believe considering the Ambra Esclusiva's exemplary sound purity.

And, of course, the mighty bass-midrange driver is also from Audio-Barletta. Everything about it is finely thought out, and that's how it sounds

Great build quality

I mentioned that Xavian is almost self-sufficient. This includes a wood factory, a paint shop, and a large parts warehouse. They even produce the crossovers and speaker connectors, as well as the packaging themselves. Such a loudspeaker piece of art naturally reminds us of the finest Italian craftsmanship. That‘s where Barletta‘s genes shine through – these are some of the best-built speakers on the market. In the Ambra Esclusiva‘s crossover, Barletta uses Jantzen and Mundorf components with tight tolerances and, he says, consistent quality, like the precision air coils in the mid-high range. He has worked with both companies for a long time and sees no reason to change.

Do you agree? You can't build a speaker cabinet much more noble and of higher quality

The stands are screwed tightly to the box

Sound

The Ambra Esclusiva is a little brightly tuned, which should be considered when choosing a system. I wanted to find out right away whether the noble Pan-European can also be dirty; therefore, John Campbell gets a go. If you don‘t know him, he‘s worth discovering. Simply put, Campbell is a singer and guitarist for Stevie Ray Vaughan fans. On „Wild Streak,“ the drums push surprisingly massive into the room but remain excellently defined. The Ambra Esclusiva proves to be astonishingly capable of handling levels. Campbell‘s voice is rich, prominent, and sexy in a wide-ranging room. I immediately recognize his guitar, which sounds so unusual, and I feel like playing it myself. I like it already. Mark Hollis‘s only solo record is a unique classic. On „Inside Looking Out,“ the piano sounds soft as a cloud, the delicately plucked bass is precisely pinned on the stage, and then – when the guitar and Hollis‘s ethereal, yet so present voice kick in this dream movie – music absorbs me completely. The Ambra Esclusiva never sounds exhausting, always involving, and can be both a work tool and a pleasure speaker – and not many can do that. I also enjoy listening to classical music with such speakers. The piano sonatas by Domenico Scarlatti, played by Christoph Ullrich, are one of my favorite discoveries in recent years. This is an outstanding Tacet recording, and the music has an almost other-worldly transparency that the Xavians perfectly convey. Ultimately, I just sit still and enjoy what I just heard.

Christian Bayer

Xavian Ambra Esclusiva

· Price per pair	5,070 Euro total
Loudspeaker	3,980 Euro
stand	1,090 Euro
· All other wood colors	
Price per pair	4,438 Euro total
Loudspeaker	ab 3,500 Euro
stand	938 Euro
· Distribution	Günter Härtel Handelsvertretung & Vertrieb
· Phone	+49 2385 5236
· Internet	www.haertel-vertrieb.de
· Warranty	2 years
· Dimensions (W x H x D)	230 x 380 x 276 mm
· Weight	approx. 12 kg

lp

Xavian Ambra Esclusiva

International 3/23

» In the not exactly limited ranks of excellent 2-way monitors, the Xavian Ambra takes one of the front places.

Polish for the Mains Voltage

What do you mean – the power for your system still comes out of the socket just like that? Without any measures to prevent sound-damaging noise from entering the system? Well, it's time for an upgrade like this one.

POWER
200
250
1.5 CE
2
3
4
5
A
1.5 CE
AUDES

Regular readers will remember that the ST-900 is not the first power conditioner from the Estonian manufacturer Audes that we have presented here. A little over a year ago, we had a giant named ST-3000 as a guest, which did the job of power cleaning very convincingly and was able to transfer energy floods of a full three kilovolt amperes of electrical power to the system - if the system wanted it and the in-house power grid was up to the task.

ST-3000 – 3000 VA load capacity; ST-900 – I'm sure you'll be able to easily crack this triad, even if you're a math hater. And so it's not surprising that the ST-900 weighs only eleven kilograms instead of its big brother's 33. The difference is also noticeable in the price: The smaller model costs EUR 2,400, the larger one EUR 4,000.

Before we delve deeper into the matter, let's clarify: How much power handling do you need for a „decent" hi-fi system? This

Pretty display instruments, but with limited usefulness in the case of the voltmeter

The fittings used are of good quality

depends first and foremost on the power amplification you have in your home. The least problematic candidates in this respect are solid-state amplifiers in class AB operation with low quiescent current or switching amplifiers. What both have in common is the fact that their current consumption is dependent on the output power currently being demanded. Generally speaking, I would say that even with a powerful integrated amplifier, you will never get the ST-900 anywhere near its capacity limits. The situation is somewhat different if you use Class A amplifiers or tube amps in A mode. Such devices consume a lot of current despite low output power and do so virtually constantly. Tubes even more, because the energy for heating is added. And that's nothing for the ST-900? Yes, it is. For example, if I use the excellent Air Tight chain from this issue plus an external tube phono preamplifier plus turntable, the power consumption is a practically constant 720 VA. This is undoubtedly not a very ecological approach to music playback, but it does not put the ST-900 in any distress. The unit might be too weak if you're running elaborate active multi-way systems with many power amplifiers. Or a home theater system with a lot of speakers.

The „small" Audes power cleaner is housed in a meticulously built cabinet of hi-fi standard dimensions, the most striking innovation being the two round pointer

Teammates

Turntable:
- Clearaudio Master Innovation
- Yamaha GT 750

Pickup Cartridges:
- Skyanalog G1
- Sculpture A.4

Transformer:
- Air Tight ATH-2 Reference
- Sculpture A Mini Nano

Tonearms:
- Clearaudio Universal
- Clearaudio Unify 14"

Phono preamplifier:
- Air Tight ATC5
- DIY

Preamplifier:
- ATC-5

Power amplifier:
- ATM-2211

Loudspeaker:
- DIY MiniOnken / Klughorn / Focal /JBL

Competitors

Power conditioner:
- PS Audio Power Plant P10

Five sockets are certainly not abundant, but you can redistribute externally

Walcott / Cherry / Vasconcelos – Codona 2

What we played

Walcott / Cherry / Vasconcelos
Codona 2

Inga Rumpf
Universe Of Dreams

Elder
Omens

Glasgow Coma Scale
Direns

The housing of the ST-900 is essentially made of MDF

instruments on the front that indicate the applied mains voltage and the flowing current. The current meter, specified with five amperes, fits perfectly. Still, you have to make concessions with the voltmeter: With the 250-volt instrument, the vital reading range is reduced to a few millimeters of scale width. Apart from that, the instruments are lovely retro displays in a stylish Bakelite case, which at least visually enhances the device noticeably.

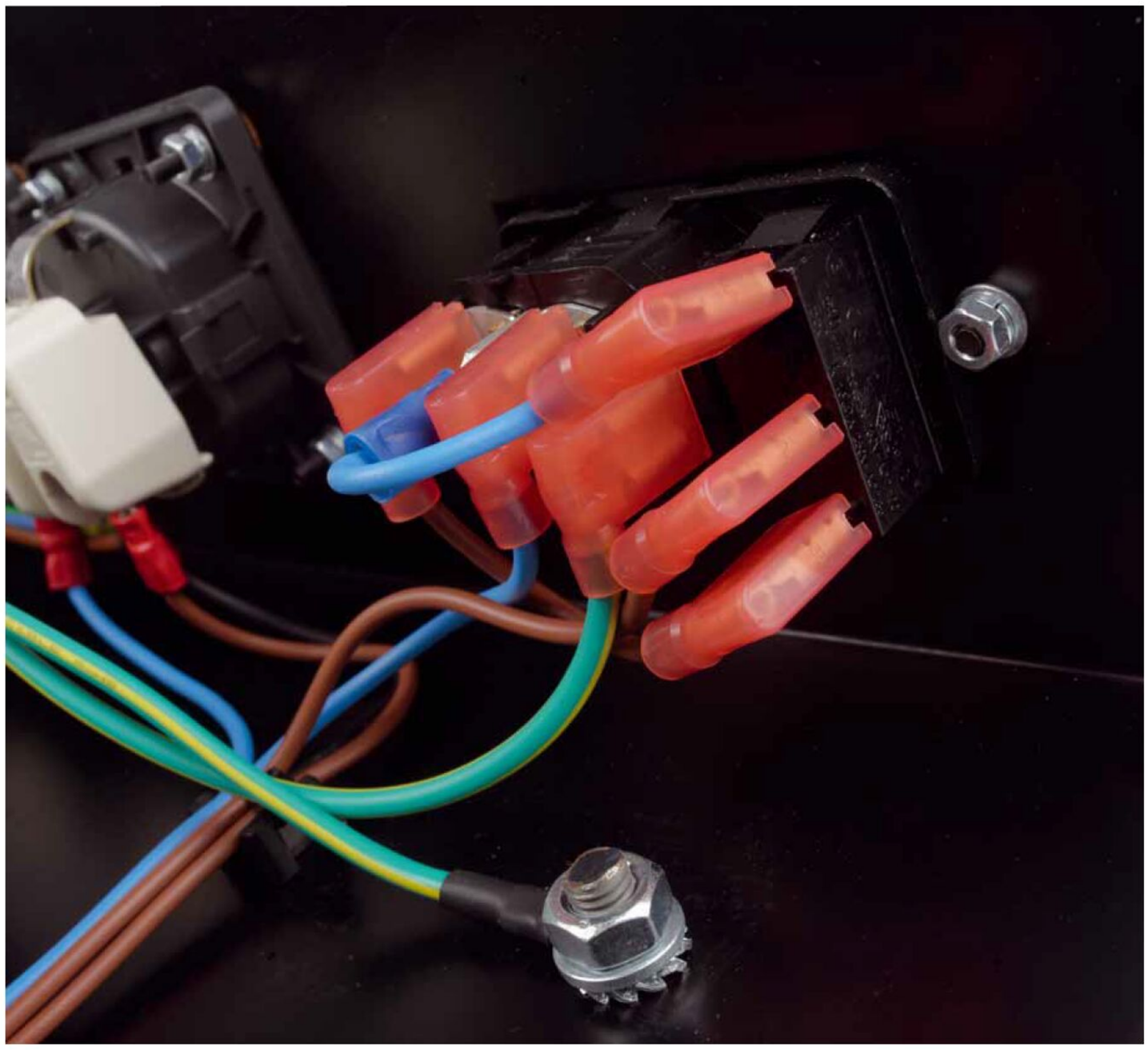
The back of the ST-900 has what you would expect from a device of this type: a power plug as the mains input, a power switch, and five sockets that provide the filtered output voltage. As with the larger model (which had six outlets), I would have liked a few more sockets, but this can be remedied with an additional power strip. The hardware used is impeccable, and the power switch will probably only be pressed once when the device is put into operation. The filter‘s power consumption is so low that it‘s not worth switching off when it‘s not in use. A look under the matte black lacquered thick-walled MDF lid – the loudspeaker manufacturer Audes clearly shows through here – reveals a richly dimensioned toroidal transformer as the only „active“ component. I dare to say that the power rating of 900 VA is conservative; elsewhere, such a caliber is also gladly titled with 1500 VA. Great, that inspires confidence. The ST-900 does not have a switch-on current brake, and I was a bit worried whether my mains fuse would handle the switch-on of the device without complaint. It does, although it‘s only a 16 amp category „B“ automatic, i.e., with medium cut-off characteristics.

Noise is always a potential issue with such large transformers, but the Audes transformer remains within limits in this respect. In other words, it is not entirely noise-free, but you have to be relatively close to hear the mechanical hum.

Now, what can such a device do, and what not? If you constantly have problems with the level of your mains voltage, the Audes transformer cannot cope with it. For that, you would need an electronic solution that elaborately rebuilds the output voltage and possibly even draws the corresponding energy from a battery. There is, as a regular reader, you know that, but you don‘t necessarily have to go that high. A device like the Audes is very well able to compensate for short-term fluctuations in the network. The large transformer is an effective energy storage device that can provide a substantial boost when needed - but only for a short time. In addition, it has a filter effect due to its principle. The type used here is an effective hurdle for frequencies above 800 Hertz; the vast majority of network

disturbances are in the frequency range considerably above this. Even significantly below the mains frequency of 50 Hertz, the transformer hardly transmits anything, which helps to substantially reduce the harmful influences of, for example, light dimmers. Another extra: The device balances the output voltage around the ground conductor so that you no longer need to worry about the polarity of the mains plug in the socket.

There is no need to fear dynamic compromises when using such a device; quite the opposite: The transformer still supplies energy even when the socket in the wall is weakening due to substantial pulse currents. Even with luxury setups like the one with the mentioned Air Tight chain, switching on the ST-900 is immediately audible: The rendition gains in size, detail resolution, and vitality, and the system seems to have even more desire to play. Well audible, for example, on the lively ECM masterpiece „Codona 2“, a colorful firework of various percussive instruments and Don Cherry‘s unmistakable trumpet. The latter peels out noticeably more clearly from the action when the ST-900 feeds the system. Nana Vasconcelo‘s multifaceted percussion shines brighter, making the album



VDE-compliant wiring; at least the housing base is connected to the protective earth conductor

With the two pointer instruments, the Audes mains filter visually passes as a power amplifier as well

more engaging. Let's try Inga Rumpf's accomplished birthday album, „Universe Of Dreams," which is a bit more pop-produced than the ECM classic. But also here, the Audes power conditioner makes itself positively noticeable: The voice comes more clearly into the foreground, and the percussion sounds crisper, simply more appropriate.

After that, I did some experiments with critical phono setups that were quite difficult to get to work with little interference: Low output voltage cartridges, followed by high gain transformers with tube phono preamps. When only the turntable and phono preamp ran through the Audes, various problems were solved abruptly. I would no longer want to operate a system without such a solution; the sound gains and practical advantages are simply too significant.

Holger Barske

Inside the ST-900, you can see the toroidal transformer. The device is now also available in a version with a built-in DC filter

Audes ST-900

· Price	2,400 Euro
· Distribution	TCG GmbH, Nordhorn
· Phone	+49 5921 7884927
· Internet	tcg-gmbh.de
· Warranty	2 years
· Dimensions (W x H x D)	477 x 121 x 347 mm
· Weight	approx. 10.7 kg

lp

Audes ST-900

International 3/23

» If there is such a thing as a sensible investment when it comes to hi-fi, then it is one in this unit. The Audes isolating transformer improves the sound's dynamics, enhances detail, and solves annoying mains interference problems.

THE ART OF CONNECTION

WBT-0120

WBT-0210

Coming soon:

Soulution 550

The Swiss manufacturer Soulution is undoubtedly one of the best-reputed electronics manufacturers on the hi-fi market. We're about to have a look at the brand new phono stage 550, which is the entry-level model in this segment.

Fink Team Borg Episode II

With the model „Borg Episode II", the well-known German speaker developer Karl-Heinz Fink presents a revised version of his floorstanding speaker „Borg". The changes are significant and the results are extremely promising.

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Michael E. Brieden Verlag
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- Editor and Publisher:
  Michael E. Brieden Verlag GmbH
  Gartroper Straße 42, D-47138 Duisburg
  Phone: 0203 4292-0
  Web: www.lp-international.info
- Redaktion LP International
  e-mail: post@lp-magazin.de
- Editor-in-Chief: Holger Barske
- Editorial management: Dipl.-Phys. Guido Randerath
- Test and editorial team:
  Holger Barske (hb), Thomas Schmidt (ts),
  Christian Bayer
- Freelance authors:
  Ralf Henke (rh), Michael Bruss (mb)
- Photography:
  Stephan Schlüter
- Additional photography:
  Holger Barske, Thomas Schmidt, Michael Bruss
- Art direction, graphics and layout:
  Heike Jans, Anna Wagner
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- Reader service: Michaela Erkens
- Ad processing: Heike Pens

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